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OM nucleic - nucleic search, using sw model

Run on: March 25, 2004, 23:39:01; Search time 8388.21 Seconds

(without alignments)

11011.138 Million cell updates/sec

Title: US-09-856-681A-1

Perfect score: 3093

Sequence: 1 atgaggtcagaagccttgct.....ccaatgatgcgtgtacataa 3093

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters: 55026578

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : EST:*

1: em estba:*

2: em_esthum:*

3: em estin:*

4: em estmu:*

5: em estov:*

6: em_estpl:*

7: em_estro:*

8: em_htc:*

9: gb est1:*

10: gb_est2:*

11: gb htc:*

12: gb_est3:*

13: gb_est4:*

14: gb_est5:*

15: em_estfun:*

16: em_estom:*

17: em_gss_hum:*

18: em gss inv:*

19: em_gss_pln:*

20: em gss_vrt:*

21: em_gss_fun:*

22: em_gss_mam:*

23: em_gss_mus:*

24: em gss_pro:*

25: em_gss_rod:*

26: em qss phq:*

27: em gss vrl:*

28: gb_gss1:* 29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		_			SUMMARI	ES
		ક				
Result		Query				
No.	Score	Match	Length	DB		Description
1	3089.8	99.9	6875	11	BC032619	BC032619 Homo sapi
2	1439.4	46.5	3226	11	AK042751	AK042751 Mus muscu
3	1437.6	46.5	3329	11	AK082711	AK082711 Mus muscu
4	1065.8	34.5	2411	14	CB605722	CB605722 AMGNNUC:M
5	899.4	29.1	1030	12	BM450002	BM450002 AGENCOURT
6	896	29.0	1183	12	BM546059	BM546059 AGENCOURT
7	828.2	26.8	868	9	AU140366	AU140366 AU140366
8	813.8	26.3	891	13	BU186963	BU186963 AGENCOURT
9	784.4	25.4	887	12	BG769297	BG769297 602742838
10	783.4	25.3	1201	9	AL543344	AL543344 AL543344
11	779.4	25.2	848	13	BQ678536	BQ678536 AGENCOURT
12	772.4	25.0	883	13	BU172225	BU172225 AGENCOURT
13	770	24.9	864	13	BQ440312	BQ440312 AGENCOURT
14	767.4	24.8	874	13	BU838082	BU838082 AGENCOURT
15	760.6	24.6	890	13	BQ683009	BQ683009 AGENCOURT
16	757.4	24.5	953	13	BU854884	BU854884 AGENCOURT
17	757	24.5	851	14	CD653925	CD653925 AGENCOURT
18	734	23.7	952	13	BU855855	BU855855 AGENCOURT
19	713.8	23.1	835	12	BG477592	BG477592 602522430
20	698.4	22.6	826	14	CD654452	CD654452 AGENCOURT
21	682.2	22.1	4374	11	AK031307	AK031307 Mus muscu
22	681.8	22.0	3921	11	AK084922	AK084922 Mus muscu
23	680.2	22.0	4476	11	AK052232	AK052232 Mus muscu
24	670.2	21.7	716	10	BF970807	BF970807 602271438
25	669.4	21.6	802	14	CD653501	CD653501 AGENCOURT
26	668.4	21.6	805	14	CD656935	CD656935 AGENCOURT
27	667	21.6	890	13	BU856543	BU856543 AGENCOURT
28	664.8	21.5	736	10	BE277845	BE277845 601120064
29	660.4	21.4	794	10	AW954605	AW954605 EST366675
30	656.2	21.2	823	12	BG327694	BG327694 602426690
31	645.8	20.9	651	9	AL602452	AL602452 DKFZp686M
32	636.6	20.6	643	10	BE408781	BE408781 601303483
33	631.8	20.4	685	10	BE265000	BE265000 601193829
34	629.8	20.4	703	10	BE384511	BE384511 601277886
35	615.2	19.9	926	12	BG326467	BG326467 602425312
36		19.9		13		BQ770491 UI-M-FI0-
37	614.4	19.9	795	14	CB245479	CB245479 UI-M-FY0-
38	612.2	19.8	772	13	BQ425051	BQ425051 AGENCOURT
39	611.8	19.8	895	12	BI819955	BI819955 603035314
40	608.8	19.7	777	13	BU708565	BU708565 UI-M-FI0-
41	608.6	19.7	747	14	CF535602	CF535602 UI-M-GH0-
42	604.4	19.5	771	14	CA513024	CA513024 UI-R-FJ0-
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44	589.2	19.0	690	12	BG333712	BG333712 602460715
c 45	588.8	19.0	592	14	CA337090	CA337090 NISC_1v09

ALIGNMENTS

RESULT 1 BC032619 HTC 04-MAR-2003 6875 bp mRNA linear LOCUS BC032619 Homo sapiens, similar to sema domain, transmembrane domain (TM), DEFINITION and cytoplasmic domain, (semaphorin) 6A, clone IMAGE:5578066, mRNA. BC032619 ACCESSION BC032619.1 GI:22749800 VERSION KEYWORDS HTC. Homo sapiens (human) SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE 1 (bases 1 to 6875) Strausberg, R. AUTHORS TITLE Direct Submission Submitted (06-JUN-2002) National Institutes of Health, Mammalian JOURNAL Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, NIH-MGC Project URL: http://mgc.nci.nih.gov REMARK Contact: MGC help desk COMMENT Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC/DCTD/DTP cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC), Gaithersburg, Maryland; Web site: http://www.nisc.nih.gov/ Contact: nisc mgc@nhgri.nih.gov Akhter, N., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S., Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P., Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R., Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C., McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 69 Row: o Column: 4 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA qi: 11991659 This clone has the following problem: retained intron. Location/Qualifiers **FEATURES** source 1. .6875 /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /clone="IMAGE:5578066" /tissue type="Skin, melanotic melanoma."

/clone_lib="NIH_MGC_72" /lab_host="DH10B" /note="Vector: pCMV-SPORT6"

Ве		99.9%; Score 3089.8; DB 11; Length 6875; Similarity 99.9%; Pred. No. 0; 1; Conservative 0; Mismatches 2; Indels 0; Gaps	0;
Qy	1	ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 6	50
Db	792		351
Qу	61	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 1	L20
Db	852		911
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 1	L80
Db	912		971
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 2	240
Db	972		1031
Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 3	300
Db	1032	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 1	L091
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 3	360
Db	1092	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 1	1151
QУ	361	ATTANAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGTCTGTGGAACTAATGCCTTC 4	120
Db	1152	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	1211
Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 4	180
Db	1212	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 1	1271
Qу	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 5	540
Db	1272	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 1	1331
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	500
Db	1332	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 1	1391
Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	1392	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 1	1451
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 7	720
Db	1452	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA 1	1511

QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	1512		1571
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1572	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1631
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1632	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1691
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1692	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1751
Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTACT	1020
Db	1752	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1811
QУ	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1812	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1871
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1872	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1931
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1932	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1991
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1992		2051
Qу	1261	ACCAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	2052	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	2111
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	2112	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	2171
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	2172	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	2231
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	2232	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	2291
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	2292	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	2351
Qy	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620

Db	2352		2411
QУ	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	2412		2471
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	2472		2531
Qу	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	1800
Db	2532		2591
Qу	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
Db	2592	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	2651
Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	2652	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	2711
Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	2712	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2771
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2772	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2831
Qу	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2832	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2891
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Db	2892	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2951
Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2952	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	3011
Qу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	3012	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	3071
Qу	2281	ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGGAAC	2340
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Db	3192	ACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC 3251
Qy	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG 2520
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Qу	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2760
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Qу	2941	GTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTG 3000
Db	3732	GTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTG 3791
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Qу	3061	ACATCCATGAAGCCCAATGATGCGTGTACATAA 3093
Db	3852	ACATCCATGAAGCCCAATGATGCGTGTACATAA 3884
RESULT 2 AK042751 LOCUS	Al	K042751 3226 bp mRNA linear HTC 19-SEP-2003

DEFINITION Mus musculus 7 days neonate cerebellum cDNA, RIKEN full-length

enriched library, clone: A730020P05 product: sema domain,

transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A,

full insert sequence.

AK042751 ACCESSION

VERSION AK042751.1 GI:26335300

KEYWORDS HTC; CAP trapper.

SOURCE Mus musculus (house mouse) ORGANISM Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. REFERENCE Carninci, P. and Hayashizaki, Y. AUTHORS High-efficiency full-length cDNA cloning TITLE Meth. Enzymol. 303, 19-44 (1999) JOURNAL 99279253 MEDLINE 10349636 PUBMED REFERENCE 2 AUTHORS Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to TITLE prepare full-length cDNA libraries for rapid discovery of new genes JOURNAL Genome Res. 10 (10), 1617-1630 (2000) MEDLINE 20499374 11042159 PUBMED REFERENCE **AUTHORS** Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system--384-format TITLE sequencing pipeline with 384 multicapillary sequencer JOURNAL Genome Res. 10 (11), 1757-1771 (2000) 20530913 MEDLINE 11076861 PUBMED REFERENCE **AUTHORS** The RIKEN Genome Exploration Research Group Phase II Team and the FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection TITLE JOURNAL Nature 409, 685-690 (2001) REFERENCE AUTHORS The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team. TITLE Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs JOURNAL Nature 420, 563-573 (2002) (bases 1 to 3226) REFERENCE 6 AUTHORS Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kasukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., Nakamura, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muramatsu, M. and Hayashizaki, Y. Direct Submission TITLE

Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of

JOURNAL

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Physical and Chemical Research (RIKEN), Laboratory for Genome
           Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
           RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
           Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
           URL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
           Fax:81-45-503-9216)
COMMENT
           cDNA library was prepared and sequenced in Mouse Genome
           Encyclopedia Project of Genome Exploration Research Group in Riken
           Genomic Sciences Center and Genome Science Laboratory in RIKEN.
           Division of Experimental Animal Research in Riken contributed to
           prepare mouse tissues.
           Please visit our web site for further details.
           URL:http://genome.gsc.riken.go.jp/
           URL: http://fantom.gsc.riken.go.jp/.
FEATURES
                    Location/Qualifiers
                    1. .3226
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VERSION
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  AUTHORS
            Carninci, P. and Hayashizaki, Y.
            High-efficiency full-length cDNA cloning
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  JOURNAL
            Meth. Enzymol. 303, 19-44 (1999)
  MEDLINE
            99279253
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  AUTHORS
            Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K.,
            Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Normalization and subtraction of cap-trapper-selected cDNAs to
            prepare full-length cDNA libraries for rapid discovery of new genes
  JOURNAL
            Genome Res. 10 (10), 1617-1630 (2000)
  MEDLINE
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            Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P.,
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  TITLE
            RIKEN integrated sequence analysis (RISA) system--384-format
            sequencing pipeline with 384 multicapillary sequencer
            Genome Res. 10 (11), 1757-1771 (2000)
  JOURNAL
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            20530913
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REFERENCE
  AUTHORS
            The RIKEN Genome Exploration Research Group Phase II Team and the
            FANTOM Consortium.
  TITLE
            Functional annotation of a full-length mouse cDNA collection
  JOURNAL
            Nature 409, 685-690 (2001)
REFERENCE
  AUTHORS
            The FANTOM Consortium and the RIKEN Genome Exploration Research
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  TITLE
            Analysis of the mouse transcriptome based on functional annotation
            of 60,770 full-length cDNAs
  JOURNAL
            Nature 420, 563-573 (2002)
REFERENCE
               (bases 1 to 3329)
  AUTHORS
            Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
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            Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Direct Submission
  JOURNAL
            Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
            Kanaqawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
            URL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
            Fax: 81-45-503-9216)
            cDNA library was prepared and sequenced in Mouse Genome
COMMENT
            Encyclopedia Project of Genome Exploration Research Group in Riken
            Genomic Sciences Center and Genome Science Laboratory in RIKEN.
            Division of Experimental Animal Research in Riken contributed to
            prepare mouse tissues.
            Please visit our web site for further details.
            URL:http://genome.gsc.riken.go.jp/
            URL:http://fantom.qsc.riken.go.jp/.
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 AUTHORS
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          Unpublished (2003)
 JOURNAL
          Contact: Dan Fitzpatrick
COMMENT
          Amgen, Inc
          One Amgen Center Drive, Thousand Oaks, CA 91320-1799, USA
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QУ	2118	CGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACT	2177
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QУ	2178	CATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGA	2237
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Qу	2238	CCAGCACCACCTGGACCTGACGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCA	2297
Db	746	CCAGCATCACTTAGACCTCACCGCCCTGCCCACCCCGGAGTCCACCCCAACACTGCAGCA	805
Qу		GAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGCAAACCTCATCAATGC	
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Db	866	CTGCACCAAGGACAT	880
Qу	2418	GGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCA	2477
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Db	1120	GGCCTCTCTGGGTCCCACGGGAGCCTCACTGTCCCAGACCGGCCTGAGCAAGCGGCTGGA	1179
Qу	2715	AATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCT	2774
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DEFINITION BM450002 1030 bp mRNA linear EST 05-FEB-2002 AGENCOURT_6393382 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:5528003 5', mRNA sequence.

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 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
 JOURNAL
          Unpublished (1999)
          Contact: Robert Strausberg, Ph.D.
COMMENT
           Email: cgapbs-r@mail.nih.gov
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            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
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Ωу	1027	TTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGAGTTCCT	1086
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RESULT 6 BM546059

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           BM546059.1 GI:18778712
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 AUTHORS
           NIH-MGC http://mgc.nci.nih.gov/.
 TITLE
           National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL
           Unpublished (1999)
           Contact: Robert Strausberg, Ph.D.
COMMENT
           Email: cgapbs-r@mail.nih.gov
           Tissue Procurement: Invitrogen
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Agencourt Bioscience Corporation
            Clone distribution: MGC clone distribution information can be
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           http://image.llnl.gov
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           Ota, T., Suzuki, Y., Saito, K., Ishii, S., Yamamoto, J., Sugiyama, T.,
 AUTHORS
           Nishikawa, T., Nakamura, Y., Sugano, S., Masuho, Y. and Isogai, T.
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           Yamamoto, J., Sugiyama, T., Nishikawa, T., Nakamura, Y., Sugano, S.,
           Masuho, Y., Isogai, T.)
 JOURNAL
           Unpublished (2000)
           Contact: Takao Isogai
COMMENT
           Genomics Laboratory
           Helix Research Institute
           1532-3 Yana, Kisarazu, Chiba 292-0812, Japan
           Tel: 81-438-52-3975
           Fax: 81-438-52-3986
           Email: genomics@hri.co.jp
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          1 (bases 1 to 891)
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 AUTHORS
          National Institutes of Health, Mammalian Gene Collection (MGC)
 TITLE
          Unpublished (1999)
 JOURNAL
          Contact: Robert Strausberg, Ph.D.
COMMENT
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RESULT 9 BG769297 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANIA	ON (IN IN I	86769297 887 bp mRNA linear EST 15-MAY-2001 502742838F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4872704 5', mRNA sequence. 86769297 86769297.1 GI:14079950 6ST. Homo sapiens (human) Homo sapiens Cukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
AUTHOR TITLE JOURNA COMMENT	L I	WIH-MGC http://mgc.nci.nih.gov/. Wational Institutes of Health, Mammalian Gene Collection (MGC) Wind Wational (1999) Contact: Robert Strausberg, Ph.D. Wind Company of Company o

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Tissue Procurement: ATCC/DCTD/DTP
          cDNA Library Preparation: Ling Hong/Rubin Laboratory
          cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
          DNA Sequencing by: Incyte Genomics, Inc.
          Clone distribution: MGC clone distribution information can be
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                 /note="Organ: skin; Vector: pOTB7; Site 1: XhoI; Site 2:
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                 into EcoRI/XhoI sites using the following 5' adaptor:
                 GGCACGAG(G). Size-selected >500bp for average insert size
                 1.8kb. Library constructed by Ling Hong in the laboratory
                 of Gerald M. Rubin (University of California, Berkeley)
                 using ZAP-cDNA synthesis kit (Stratagene) and Superscript
                 II RT (Life Technologies). Note: this is a NIH MGC
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Db
       1963 GTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGT 2022
Qу
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Db
       Qу
           122 GATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGGAGGAGCTCACCCACTCG 181
Db
       2083 CGCCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCC 2142
Qу
           Db
        182 CGCCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCC 241
       2143 AAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACT 2202
Qу
           242 AAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACT 301
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Qу
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302 CCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCC 361

Db

~1	3 CTCCCCACCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGC 2322
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Qy 2323	GCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATG 2382
Db 422	2 CGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATG 481
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Db 482	2 GGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGC 541
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Db 542	2 GTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGGCCAAA 601
Qy 2503	ATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAA-GAC 2561
Db 602	2 ATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGGAC 661
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Db 662	2 CATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGGGTGAACCTTGTGGAGAACC 721
Qy 262	TGGACAGCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGC 2678
Db 722	2 TGGACAGCCTGCCCCCGATAGTTCACAGCGGGAGGCCTCCCTGGGTCCACCGGTAAGCC 781
~1	CTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGG 2738
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DEFINITION A	AL543344 1201 bp mRNA linear EST 31-MAY-2003 AL543344 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA
ACCESSION A VERSION A KEYWORDS I SOURCE I ORGANISM I	clone CS0DI001YL17 5-PRIME, mRNA sequence. AL543344 AL543344.2 GI:31265191 EST. Homo sapiens (human) Homo sapiens
REFERENCE : AUTHORS : TITLE : JOURNAL : COMMENT :	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. L (bases 1 to 1201) Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001) On Feb 15, 2001 this sequence version replaced gi:12875822. Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France

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Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
         Library was constructed by Life Technologies, a division of
         Invitrogen. This sequence belongs to sequence cluster 2864 To For
         more information about this cluster, see
         http://www.genoscope.cns.fr/
         cqi-bin/cluster.cqi?seq=CS0DI001CF09QP1&cluster=2864.r. Contact:
         Feng Liang Email: fliang@lifetech.com URL:
         http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
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                /note="1st strand cDNA was primed with a NotI-oligo(dT)
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                    221 TTTGTGATGAAAACAGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG 280
Db
       1774 ACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGAC 1833
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       1834 TCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAG 1893
Qy
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Qy
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Dh
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Qγ
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Qy 2	254	CTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGC 2313
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Qy 2	374	CCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCAC 2433
Db	880	CCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCAC 939
Qy 2	434	ATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGAC 2493
Db	940	ATCCCCAGCGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGAC 999
Qy 2	494	CAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAG 2553
		AGCCCAAATGAGCGAGGTGG-CCAGATGGCGCTGGARGRCCAGG-CGSCACACTGGAG 1055
Qy 2	554	TATAAGACCATCAAGGAACATCTCAGCAG 2582
Db 1	.056	TWTAAGACATCAAGGAAATTYAGCAGCAG 1084
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High quality sequence stop: 695.
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                 into EcoRI/XhoI sites using the following 5' adaptor:
                 GGCACGAG(G). Library constructed by Ling Hong in the
                 laboratory of Gerald M. Rubin (University of California,
                 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
                 Superscript II RT (Life Technologies). Note: this is a
                 NIH MGC Library."
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Db
       1466 GCATGCAGCTGGACAGAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAA 1525
Qy
           181 GCATGCAGCTGGACAGCAGCCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAA 240
Dh
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       1526 AGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCA 1585
           Dh
        241 AGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCA 300
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Qy
           301 GAGACCCATATTGTGGATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACA 360
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Db
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Qу

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Db 5	41 TGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGGCAGTGTCTTCCCATAATCACCAAG 600
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Db 7	
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Db 7	
Qy 21	22 CTCTTT 2127
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EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH MGC Library."
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Qу	1601	GATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT
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Qу	1661	AGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCCTTTGTGG 1720
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REFERENCE
          NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
 TITLE
          National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL
          Unpublished (1999)
COMMENT
          Contact: Robert Strausberg, Ph.D.
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: ATCC/DCTD/DTP
           cDNA Library Preparation: Life Technologies, Inc.
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
           Clone distribution: MGC clone distribution information can be
          found through the I.M.A.G.E. Consortium/LLNL at:
          http://image.llnl.gov
          Plate: LLAM13504 row: c column: 07
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/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2 kb. Library constructed by Life
Technologies."

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QУ	1656	TTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCCTT	1715
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QУ	1716	TGTGGCACTGAATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGAC	1775
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Qу	1836	ACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGAGG	1895
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Qу	1896	AGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGC	1955
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Qу	1956	CATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTG	2015
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Qу	2016	CGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCAC	2075
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           1 (bases 1 to 874)
           NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
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           National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL
           Unpublished (1999)
COMMENT
           Contact: Robert Strausberg, Ph.D.
           Email: cgapbs-r@mail.nih.gov
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                    GGCACGAG(G). Library constructed by Ling Hong in the
                    laboratory of Gerald M. Rubin (University of California,
                    Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
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  AUTHORS
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  JOURNAL
           Contact: Robert Strausberg, Ph.D.
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                    GGCACGAG(G). Library constructed by Ling Hong in the
                    laboratory of Gerald M. Rubin (University of California,
                    Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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March 25, 2004, 21:56:51; Search time 12300 Seconds Run on:

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US-09-856-681A-1 Title:

Perfect score: 3093

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Gapop 10.0 , Gapext 1.0

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Post-processing: Minimum Match 0%

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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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DEFINITION Sequence 1 from Patent W00031252.

ACCESSION AX026741

VERSION AX026741.1 GI:10187886

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SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Klostermann, A. and Behl, C.

TITLE Human semaphorin 6a-1 (sema6a-a), a gene involved in neuronal

development and regeneration mechanisms during apoptosis, and its

use as a potential drug target

JOURNAL Patent: WO 0031252-A 1 02-JUN-2000;

KLOSTERMANN ANDREAS (DE) ; MAX PLANCK GESELLSCHAFT (DE) ; BEHL

CHRISTIAN (DE)

FEATURES Location/Qualifiers

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RESULT 2 AX026746

LOCUS AX026746 3862 bp
DEFINITION Sequence 6 from Patent W00031252. DNA linear PAT 16-SEP-2000

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           Klostermann, A. and Behl, C.
  AUTHORS
           Human semaphorin 6a-1 (sema6a-a), a gene involved in neuronal
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JOURNA MEDLIN PUBME REFERENC AUTHOR TITLE JOURNA	IE ED CE RS	zyxin-like domain J. Biol. Chem. 275 (50), 39647-39653 (2000) 20564339 10993894 2 (bases 1 to 3862) Klostermann, A., Lutz, B., Gertler, F. and Behl, C. Direct Submission Submitted (19-JUN-2000) Independent Research Group Neurodegeneration, MPI of Psychiatry, Kraepelinstrasse 2-10, Munich

80804, Germany

FEATURES

Location/Qualifiers

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ORIGIN

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Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
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QУ	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
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Db	1114		1173
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Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
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Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
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           Ohara, O., Nagase, T. and Kikuno, R.
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           Laboratory of DNA Technology; 1532-3 Yana, Kisarazu, Chiba
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             250 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 309
Db
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Qу
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MEDLINE

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Db	370	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	429
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	430		489
Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	490	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	549
Qy	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	550		609
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Db	610	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	669
Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	670	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	729
Qу	481	GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	730	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	789
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Db	790	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	849
Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	850	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	909
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	910	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	969
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	970	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	1029
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Db	1030	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1089
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTTTTTCAACATTCTCCAGGCAGTTACA	1149
Qy	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960

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Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
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Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
QУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
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QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
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Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
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Db	1750	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1809
Qy	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1810	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
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Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
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Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCTTTG	2049

Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2050	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2109
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGGCAGTGTCT	2169
Qу	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
Qу	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
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QУ	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2409
Qу	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2469
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
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Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2709
Qу	2410	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2710	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGCTCCTGCCCATCACGCAGCAG	2769
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
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Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
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QУ	265	0 CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC
Db	295	0 CGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC
Qу	271	0 CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC 2769
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QУ	277	0 TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT 2829
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Qу	283	0 TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCC 2889
Db	313	0 TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCC 3189
QУ	289	0 CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 2949
Db	319	0 CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 3249
Qу	295	0 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3009
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KEYWORDS		•
SOURCE ORGANI	SM	Homo sapiens (human) Homo sapiens
ONGAIVI	DIT	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENC AUTHOR		1 Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S.,
AUTHOR	.S	Dugas, M., Eils, R., Brors, B. and Mergenthaler, S.
TITLE	7	Novel genetic markers for leukemias
JOURNA	L)	Patent: WO 03039443-A 2702 15-MAY-2003; Deutsches Krebsforschungszentrum (DE);
		Ludwig-Maximilian-Universitaet Muenchen (DE); Haferlach, Torsten,
FEATURES	,	PD Dr. Dr. (DE) ; Schoch, Claudia (DE) ; Kern, Wolfgang (DE) Location/Qualifiers

source 1. .4982

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/db_xref="taxon:9606"

ORIGIN

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Qу	61	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	120
Db	672	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	731
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
Db	732	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	791
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	792	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	851
Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	852	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	911
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	912	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	971
Qу	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	972	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	1031
Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	1032	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	1091
Qу	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	1092	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	1151
QУ	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	1152	AAACTATACTCAGCCNCAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	1211
Qу	601	CTTGG-AGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACC	659
Db	1212		1271
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Qу	720	AGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAA	779
Db	1332	AGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAA	1391
Qγ	780	TGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCG	839
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Qу	840	CTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTAC	899
Db	1452	CTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTAC	1511
QУ	900	AGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAA	959
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Db	1692	AGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAAC	1751
Qу	1140	CTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGA	1199
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QУ	1200	GGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCT	1259
Db	1812	GGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCT	1871
Qу	1260	TACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCT	1319
Db	1872	TACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCT	1931
Qy	1320	GGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCT	1379
Db		GGGATCAGAGAAGGGAATCATCTTGAAGTTTTNGGCCAGAATAGGAAATAGTGGTTTTCT	
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Db	1992	AAATGACAGCCTTTTCCTGGAGGAGATGNAGTGTTTACAACTCTGAAAAATGCAGCTATG	2051
Qу		ATGGAGTCGAAGACAAAAGGATCATGGGCATG~CAGCTGGACAGAGCAAGCAGCTCTCTG	
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Dh	2112	TATGTTGCGTNCTCTACCTGTGTGATAAAGGTTCCCCTTGNGCNGGTGTGAACGACATGG	2171

Qу		GAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
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Qу	1677	TGGCAATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	2292	TGGCAATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTC	2351
QУ	1727	ATGGGCATTCCAGTTCCCT	1745
Db	2352	AACTCCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCT	2411
Qy	1746	CTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGG	1805
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Qy	1806	AATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGT	1865
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Qу	1926	CGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGG	1985
Db	2592	CGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGG	2651
Qу	1986	GGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGC	2045
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Db	2712		2771
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Qy	2166	CCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCT	2225
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Db	2892		2951
Qу	2286	AACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGCAAAACCAGAA	2345
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Qу	2346	CCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGA	2405

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QУ		CATGAAGCCCAATGATGCGTGTACATAA 3093
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RESULT 7 AX884099

LOCUS AX884099 6060 bp DNA linear PAT 17-DEC-2003 DEFINITION Sequence 19004 from Patent EP1074617.

ACCESSION AX884099

AX884099.1 GI:40039000 VERSION KEYWORDS SOURCE Homo sapiens (human) Homo sapiens ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE AUTHORS Ota, T., Isogai, T., Nishikawa, T., Hayashi, K., Saito, K., Yamamoto, J., Ishii, S., Sugiyama, T., Wakamatsu, A., Nagai, K. and Otsuki, T. TITLE Primers for synthesising full-length cDNA and their use Patent: EP 1074617-A 19004 07-FEB-2001; JOURNAL Research Association for Biotechnology (JP) **FEATURES** Location/Qualifiers 1. .6060 source /organism="Homo sapiens" /mol type="unassigned DNA" /db xref="taxon:9606" $89.^{-}.1345$ CDS /note="unnamed protein product" /codon start=1 /protein id="CAE92227.1" /db xref="GI:40039001" translation="MIMNGTLYIAARDHIYTVDIDTSHTEEIYCSKKLTWKSRQADVD/ TCRMKGKHKDECHNFIKVLLKKNDDALFVCGTNAFNPSCRNYKMDTLEPFGDEFSGMA RCPYDAKHANVALFADGKLYSATVTDFLAIDAVIYRSLGESPTLRTVKHDSKWLKEPY FVQAVDYGDYIYFFFREIAVEYNTMGKVVFPRVAQVCKNDMGGSQRVLEKQWTSFLKA RLNCSVPGDSHFYFNILOAVTDVIRINGRDVVLATFSTPYNSIPGSAVCAYDMLDIAS VFTGRFKEQKSPDSTWTPVPDERVPKPRGCCAGSSSLERYATSNEFPDDTLNFIKTH PLMDEAVPSIFNRPWFLRTMVRYRLTKIAVDTAAGPYQNHTVVFLGSEKGIILKFLAR IGNSGFLNDSLFLEEMSVYNSEKMQL" ORIGIN Query Match 96.0%; Score 2969.6; DB 6; Length 6060; Best Local Similarity 99.8%; Pred. No. 0; Matches 2994; Conservative 0; Mismatches 2; 4; Indels 2; Gaps 96 CAACTATACAAAACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACA 155 Qy 1 CAACTATACAAAACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACA 60 Db Qy 156 GAGGCACAGGCTGGACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGC 215 61 GAGGCACAGGCTGGACATCCAGGTGATTATGATCATGAACGGAACCCTCTACATTGCTGC 120 Dh Qy 216 TAGGGACCATATTTATACTGTTGATATAGACACATCACACACGGAAGAAATTTATTGTAG 275 Db 121 TAGGGACCATATTTATACTGTTGATATAGACACATCACACACGGAAGAATTTATTGTAG 180 276 CAAAAAACTGACATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAA 335 Qу

> 336 ACATAAGGATGAGTGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATT 395

396 GTTTGTCTGTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATT 455

Db

Qу

Db

Qу

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Db	361	GGAACCATTCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAAC	420
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Db	421	CAACGTTGCACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	480
QУ	576	CATTGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCA	635
Db .	481	CATTGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCA	540
QУ	636	CGATTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATAT	695
Db	541		600
Qу	696	CTACTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCC	755
Db	601	CTACTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCC	660
QУ	756	AAGAGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACA	815
Db	661	AAGAGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACA	720
Qy	816	GTGGACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTA	875
Db	721	GTGGACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTA	780
Qу	876	TTTCAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCT	935
Db	781	TTTCAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCT	840
QУ	936	GGCAACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACAT	995
Db	841	GGCAACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACAT	900
Qy	996	GCTTGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCAC	1055
Db	901	GCTTGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCAC	960
Qy	1056	CTGGACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTC	1115
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Qу	1116	ATCCTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCAT	1175
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Qу	1176	CAAGACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCT	1235
Db	1081	L CAAGACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCC	1140
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Db	1141	GAGAACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATA	1200
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Qу	1475	TGGACAGAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCC	1534
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QУ	1654	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCC	1713
Db	1561	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCC	1620
Qу		TTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG	
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Qy		ACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGAC	
Db		ACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGAC	
QУ		TCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAG	
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Qу		GGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTG	
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ДУ		ACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGAC	
Db	TART	ACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGAC	Z U 4 U

Qу		ACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAG	
Db	2041	${\tt ACTCAATCCGAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAG}$	2100
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Qу	2254	CTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGC	2313
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Db	2221	CGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACATG	2280
QУ	2374	CCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCAC	2433
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Qу	2554	TATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTG	2613
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Db	2521		2580
QУ	2674	GGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCC	2733
Db	2581		2640
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Db	2641		2700
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BD160721
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           Primer for synthesizing full-length cDNA and use thereof.
DEFINITION
ACCESSION
           BD160721
           BD160721.1 GI:27866479
VERSION
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KEYWORDS
SOURCE
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 ORGANISM
           Homo sapiens
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
              (bases 1 to 6060)
REFERENCE
           Ota, T., Isogai, T., Nishikawa, T., Hayashi, K., Saito, K., Yamamoto, J.,
 AUTHORS
           Ishii, S., Sugiyama, T., Wakamatsu, A., Nagai, K. and Otsuki, T.
           Primer for synthesizing full-length cDNA and use thereof
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           Patent: JP 2002191363-A 15564 09-JUL-2002;
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                28-JUL-2000 JP 2000280990
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                JUNICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU,
           PΙ
                KEIICHI NAGAI, TETSUJI OTSUKI
           PΙ
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                                                4;
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Qv
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Οv
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Qу	216	TAGGGACCATATTTATACTGTTGATATAGACACATCACACACGGAAGAAATTTATTGTAG	275
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Db	901	GCTTGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCAC	960
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QУ	1116	ATCCTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCAT	1175
Db	1021	ATCCTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCAT	1080
Qу	1176	CAAGACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCT	1235
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QУ	1236	GAGAACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATA	1295
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QУ	1356	CAGAATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTA	1415
Db	1261	CAGAATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTA	1320
Qу	1416	CAACTCTG-AAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGC	1474
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QУ	1535	TTGGCCGGTGTGAACGACATGGGAAGTGT-AAAAAAACCTGTATTGCCTCCAGAGACCCA	1593
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Qy	1834	TCACCTGACAGCACAGACCCTTTGGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAG	1893
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Qу	1954	GCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTAC	2013
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QУ	2074	ACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGAC	2133
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COMMENT		Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing and clone selection: Helix Research Institute (supported by Japan Key Technology Center etc.) and Department of Virology, Institute of Medical Science,					

University of Tokyo.

FEATURES Location/Qualifiers

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ORIGIN

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         Jacobs, K., Mccoy, J.M., Lavallie, E.R., Collins-Racie, L.A., Evans, C.,
 AUTHORS
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RESULT 13 BC059238

LOCUS BC059238 4702 bp mRNA linear ROD 20-OCT-2003 DEFINITION Mus musculus sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A, mRNA (cDNA clone MGC:66957 IMAGE:6417475), complete cds.

BC059238 ACCESSION BC059238.1 GI:37748386 VERSION KEYWORDS Mus musculus (house mouse) SOURCE ORGANISM Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. REFERENCE (bases 1 to 4702) Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., AUTHORS Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriquez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length TITLE human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) JOURNAL MEDLINE 22388257 12477932 PUBMED 2 (bases 1 to 4702) REFERENCE AUTHORS Strausberg, R. Direct Submission TITLE Submitted (01-OCT-2003) National Institutes of Health, Mammalian JOURNAL Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, NIH-MGC Project URL: http://mgc.nci.nih.gov REMARK Contact: MGC help desk COMMENT Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. Jim Lin, University of Iowa cDNA Library Preparation: M. Bento Soares, University of Iowa cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305 http://www-shgc.stanford.edu Web site: Contact: (Dickson, Mark) mcd@paxil.stanford.edu Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers, R. M. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 125 Row: o Column: 20 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 9055333.

Location/Qualifiers

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 Ouery Match
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Qy

Dh

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Qy .	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
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VERSION KEYWORDS	5	
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REFERENC AUTHOF		Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 3018) Klostermann, A., Lutz, B., Gertler, F. and Behl, C.
TITLE		The orthologous human and murine semaphorin 6A-1 proteins (SEMA6A-1/Sema6A-1) bind to the enabled/vasodilator-stimulated phosphoprotein-like protein (EVL) via a novel carboxyl-terminal zyxin-like domain
JOURNA MEDLIN		J. Biol. Chem. 275 (50), 39647-39653 (2000) 20564339
PUBME REFERENC		10993894 2 (bases 1 to 3018)
AUTHOF TITLE		Klostermann, A. and Behl, C. Direct Submission

Submitted (21-JUL-2000) Independent Research Group JOURNAL

Neurodegeneration, MPI of Psychiatry, Kraepelinstrasse 2-10, Munich

80804, Germany

Location/Qualifiers **FEATURES**

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DB 10;

Length 3018;

ORIGIN

Db

Query Match

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Score 2414.8;

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Db	421	AACCCTTCCTGCAGAAACTACAGGGTCGATACCTTGGAAACTTTTGGGGATGAATTTAGC	480
Qу	481	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTTTTGCAGATGGA	540
Db	481	GGAATGCCCAGATGCCCAAACATGTCAACATCGCTCTGTTTGCAGATGGA	540
QУ	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	541	AAACTCTACTCGGCTACAGTGACTGACTTTCTGGCCATTGATGCGGTCATTTACAGGAGC	600
Qy	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	601	CCCGGAGACAGCCCTACCCTCAGGACTGTCAAGCATGATTCAAAGTGGTTGAAAGAGCCG	660
Qy	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	661	TACTTTGTCCAAGCCGTGGATTATGGGGGACTATATCTACTTCTTCAGAGAAATTGCA	720
QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	721	GTAGAATACAACACTATGGGAAAGGTTGTTTTCCCTAGGGTGGCTCAGGTCTGTAAGAAT	780
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	781	GACATGGGAGGGTCTCAGAGAGTCCTGGAGAAGCAGTGGACATCTTTCCTGAAGGCTCGC	840
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	841	$\tt CTGAACTGCTCGGTGCCTGGAGACTCTCATTTTTATTTCAATATACTCCAGGCAGTTACA$	900
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	901	GATGTGATTCGCATTAATGGCCGTGATGTTGTCTTGGCAACCTTTTCCACACCTTATAAC	960
QУ	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	961	AGCATCCCAGGTTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCTGATGTTTTCACT	1020
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1021	GGGAGGTTCAAGGAACAGAAATCACCTGACTCTACCTGGACACCCGTTCCAGACGAACGA	1080
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1081	$\tt GTCCCTAAGCCCAGGCCAGGCTGTTGTGCTGGATCATCCTCTTTAGAAAAATATGCAACC$	1140

Qy	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1141	TCCAATGAGTTTCCCGATGATACCCTGAACTTCATTAAGACGCATCCACTCATGGACGAG	1200
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1201	GCAGTGCCTTCCATCATCAACAGACCTTGGTTCCTGAGAACAATGGTCAGATACCGCCTG	1260
QУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1261	ACCAAAATTGCAGTAGACAACGCTGCCGGGCCATATCAGAATCACACTGTGG	1312
QY	1321	${\tt GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGGAAATAGTGGTTTTCTA}$	1380
Db	1313		1312
QY	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1313	TTTTCCTGGAGGAGATGAATGTTTACAACCCAGAAAAGTGCAGCTATGAT	1362
QУ	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1363	GGTGTAGAAGACAAAAGGATCATGGGCATGCAGCTCGACAGAGCGAGTGGCTCACTCTAT	1422
QУ	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1423	GTTGCATTCTCTACTTGTGTGATCAAGGTGCCTCTTGGCCGCTGTGAGCGACATGGGAAG	1482
Qy	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1483	TGTAAAAAACCTGCATCGCCTCCAGAGACCCGTATTGTGGGTGG	1542
Qy	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1543	TCCTGTGCCCATCTGTCACCCCTTAGCAGACTGACATTTGAGCAGGACATTGAGCGTGGC	1602
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Db	1603	AATACGGACGGCCTAGGAGACTGTCACAATTCCTTCGTGGCACTGAATGGGCACGCCAGT	1662
Qу	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	1800
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Db			
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Db			
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Db	2143		2202
Qу	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCGCG	2340
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Db	2443		2502
Qу	2578	AGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCC	2637
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Qу	2638	AAAGTTCCACAGCGGGAGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGT	2697
Db	2563		2622
Qу	2698	CTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGC	2757
Db	2623		2682
Qу	2758	TACCCCACGAACTCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACAC	2817
Db	2683		2742
Qу	2818	AACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCG	2877

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Qу
             2803 CCCCCGCCCCGCAGCGGTGGACTCTATCCAGGTGCACAGCTCCCAGCCCTCTGGCCAG 2862
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Qу
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             2863 GCCGTGACTGTTTCGAGGCAGCCCAGCCTCAATGCCTACAACTCACTGACGAGGTCGGGG 2922
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             Db
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Qу
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RESULT 15
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LOCUS
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                                                   linear
                                                            ROD 11-DEC-2003
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DEFINITION
           cytoplasmic domain, (semaphorin) 6A, mRNA (cDNA clone MGC:86119
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ACCESSION
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VERSION
KEYWORDS
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SOURCE
           Mus musculus (house mouse)
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 ORGANISM
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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REFERENCE
             (bases 1 to 4139)
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 AUTHORS
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           Generation and initial analysis of more than 15,000 full-length
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           human and mouse cDNA sequences
           Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  JOURNAL
           12477932
  PUBMED
              (bases 1 to 4139)
REFERENCE
 AUTHORS
           Strausberg, R.
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Direct Submission TITLE Submitted (26-NOV-2003) National Institutes of Health, Mammalian JOURNAL Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov COMMENT Contact: MGC help desk Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. James Lin, University of Iowa cDNA Library Preparation: M. Bento Soares, University of Iowa cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: University of Iowa, Dr. M. Bento Soares and Dr. Thomas L. Casavant. Web site: http://genome.uiowa.edu Contact: bento-soares@uiowa.edu; tom-casavant@uiowa.edu Bonaldo, M.F., Akabogu, I., Bair, T., Bair, J., Crouch, K., Davis, A., Fishler, K., Keppel, C., Kucaba, T., Lebeck, M., Melo, A., Schaefer, K., Scheetz, T., Smith, C., Snir, E., Tack, D., Trout, K., Walters, J., Casavant, T., Soares, M.B. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: Row: Column: 0. Series: **FEATURES** Location/Qualifiers source 1. .4139 /organism="Mus musculus" /mol type="mRNA" /strain="C57BL/6" /db xref="taxon:10090" /clone="MGC:86119 IMAGE:6841689" /tissue type="Brain" /clone lib="NIH BMAP GHO" /lab host="DH10B" /note="Vector: pYX-ASC" 1. .4139 gene /gene="Sema6a" /note="synonyms: VIa, sema, Sema6A-1, A730020P05Rik" /db xref="LocusID:20358" /db xref="MGI:1203727" CDS 248. .3178 /codon start=1 /product="Sema6a protein" /protein id="AAH62979.1" /db xref="GI:38566246" /db xref="LocusID:20358" /translation="MRPAALLLCLTLLHCAGAGFPEDSEPISISHGNYTKQYPVFVGH KPGRNTTORHRLDIOMIMIMNRTLYVAARDHIYTVDIDTSHTEEIYCSKKLTWKSROA DVDTCRMKGKHKDECHNFIKVLLKKNDDTLFVCGTNAFNPSCRNYRVDTLETFGDEFS GMARCPYDAKHANIALFADGKLYSATVTDFLAIDAVIYRSLGDSPTLRTVKHDSKWLK EPYFVOAVDYGDYIYFFFREIAVEYNTMGKVVFPRVAOVCKNDMGGSORVLEKOWTSF LKARLNCSVPGDSHFYFNILQAVTDVIRINGRDVVLATFSTPYNSIPGSAVCAYDMLD IANVFTGRFKEQKSPDSTWTPVPDERVPKPRPGCCAGSSSLEKYATSNEFPDDTLNFI KTHPLMDEAVPSIINRPWFLRTMVRYRLTKIAVDNAAGPYQNHTVVFLGSEKGIILKF

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misc feature 413. .1678

/note="Sema; Region: semaphorin domain"

/db xref="CDD:smart00630"

misc_feature 1787. .1888

/note="PSI; Region: domain found in Plexins, Semaphorins

and Integrins"

/db xref="CDD:smart00423"

ORIGIN

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Qу	1	ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC	60
Db	248		307
Qу	61	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	120
Db	308		367
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACAGAGGCACAGGCTGGACATCCAGATG	180
Db	368	TTTGTGGGCCACAAGCCAGGACGCAACACCACGCAGAGGCACAGGCTGGACATCCAGATG	427
Qy	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	428	ATCATGATCATGAACAGAACCCTCTACGTTGCTGCTCGAGACCATATTTATACTGTTGAT	487
Qy	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	488	ATAGACACATCCCACACAGAAGAAATTTACTGTAGCAAAAAACTGACATGGAAATCTAGA	547
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	548	CAGGCTGACGTAGACACATGCAGGATGAAGGGAAACATAAGGATGAATGTCACAACTTC	607
Qу	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	608	ATTAAAGTTCTTCTCAAGAAGAATGATGATACGCTGTTTGTCTGTGGAACCAATGCCTTC	667
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	668	AACCCTTCCTGCAGAAACTACAGGGTCGATACCTTGGAAACTTTTGGGGATGAATTTAGC	727
QУ	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	728	GGAATGGCCAGATGCCCTTATGATGCCAAACATGCCAACATCGCTCTGTTTGCAGATGGA	787
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600

Db	788	${\tt AAACTCTACTCGGCTACAGTGACTGACTTTCTGGCCATTGATGCAGTCATTTACAGGAGC}$	847
QУ	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	848	CTCGGAGACAGCCCTACCCTCAGGACTGTCAAGCATGATTCAAAGTGGTTGAAAGAGCCG	907
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Db	908	TACTTTGTCCAAGCCGTGGATTATGGGGGACTATATCTACTTCTTCAGAGAAATTGCA	967
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
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QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1028	GACATGGGAGGGTCTCAGAGAGTCCTGGAGAAGCAGTGGACATCTTTCCTGAAGGCTCGC	1087
QΥ	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1088	$\tt CTGAACTGCTCGGTGCCTGGAGACTCTCATTTTTATTTCAATATACTCCAGGCAGTTACA$	1147
QУ	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1148	GATGTGATTCGCATTAATGGCCGTGATGTTGTCTTGGCAACCTTTTCCACACCTTATAAC	1207
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Qy		GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	
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Qу		GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	
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Ε)b	1688	GGTGTAGAAGACAAAAGGATCATGGGCATGCAGCTCGACAGAGCGAGTGGCTCACTCTAT	1747
Ç	jλ	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Γ)b	1748	GTTGCATTCTCTACTTGTGTGATCAAGGTGCCTCTTGGCCGCTGTGAGCGACATGGGAAG	1807
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I	Ob	1976		1975
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I	Ob	1976		1975
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Ç	Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
1	Db	2003	AGCAACGACCAGCTTGTTCCTGTCACCCTCCTGGCCATTGCAGTCATTCTGGCTTTTGTC	2062
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1	Db	2123	GTGGCAGTAGTGCAGCGCAAGGAGAAAGAGCTCACTCACT	2182
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:	Db	2183	AGTGTCACCAAGCTCAGTGGCCTCTTTGGGGACACCCAGTCCAAGGACCCAAAGCCTGAG	2242
(Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
	Db	2243	GCCATCCTCACACCACTCATGCACAACGGCAAGCTGGCCACGCCTAGCAACACCGCCAAG	2302
	Ωу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
	Dh	2303	THE ATTEMPT A ACCOMPANCE ACCOMPAN	2362

QУ		ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCGGGAGTGGGAGAGCAAC	
Db	2363	ACCCCGACACTGCAGCAGAAACGGAAACCCAACCGCGGCAGTCGCGAGTGGGAGAGGAAC	2422
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Qy	2578	AGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCC	2637
Db	2663	AGTAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCT	2722
Qy	2638	AAAGTTCCACAGCGGGAGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGT	2697
Db	2723	AAAGTTCCACAGCGCGAGGCCTCCCTAGGTCCCCCGGGAACCTCACTGTCACAAACCGGC	2782
Qу	2698	CTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGC	2757
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QУ	2758	TACCCCACGAACTCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACAACACT	2817
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Db	2963	CCCCCGCCCGCAGCGGGTGGACTCTATCCAGGTGCACAGCTCCCAGCCCTCTGGCCAG	3022
Qу	2938	GCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGG	2997
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Qу	2998	CTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCAAACCATCCTTTGCTCCCCTT	3057
Db	3083	CTGAAGCGCACCCCTCGCTAAAGCCAGATGTACCCCCCAAACCTTCCTT	3142
Qу	3058	TCCACATCCATGAAGCCCAATGATGCGTGTACATAA 3093	
Db	3143	TCCACATCCATGAAGCCCAATGATGCATGTACATAA 3178	

Search completed: March 26, 2004, 03:40:51 Job time: 12317 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 25, 2004, 19:45:25; Search time 1238.51 Seconds

(without alignments)

10609.274 Million cell updates/sec

Title: US-09-856-681A-1

Perfect score: 3093

Sequence: 1 atgaggtcagaagccttgct.....ccaatgatgcgtgtacataa 3093

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: N Geneseq 29Jan04:*

1: geneseqn1980s:*

2: geneseqn1990s:*

3: geneseqn2000s:*

4: geneseqn2001as:*

5: geneseqn2001bs:*

6: geneseqn2002s:*

7: geneseqn2003as:*

8: geneseqn2003bs:*

9: geneseqn2003cs:*

10: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Score	% Query Match	Length	DB	ID	Description	
3093	100.0	3862	3	AAD01233	Aad01233 Human se	m
3038	98.2	3498	3	AAA93617	Aaa93617 Human se	m
3038	98.2	3498	8	ADA23280	Ada23280 cDNA enc	:0
3032	98.0	4280	7	ABX71103	Abx71103 Novel hu	ım
3025.6	97.8	4250	8	ADA23361	Ada23361 cDNA enc	:0
2969.6	96.0	6060	4	AAH18729	Aah18729 Human cD	N
2746.2	88.8	3550	2	AAV44295	Aav44295 Human se	:C
	3093 3038 3038 3032 3025.6 2969.6	Query Score Match 3093 100.0 3038 98.2 3038 98.2 3032 98.0 3025.6 97.8 2969.6 96.0	Query Score Match Length 3093 100.0 3862 3038 98.2 3498 3038 98.2 3498 3032 98.0 4280 3025.6 97.8 4250 2969.6 96.0 6060	Query Score Match Length DB 3093 100.0 3862 3 3038 98.2 3498 3 3038 98.2 3498 8 3032 98.0 4280 7 3025.6 97.8 4250 8 2969.6 96.0 6060 4	Query Score Match Length DB ID 3093 100.0 3862 3 AAD01233 3038 98.2 3498 3 AAA93617 3038 98.2 3498 8 ADA23280 3032 98.0 4280 7 ABX71103 3025.6 97.8 4250 8 ADA23361 2969.6 96.0 6060 4 AAH18729	Query Score Match Length DB ID Description 3093 100.0 3862 3 AAD01233 Aad01233 Human se 3038 98.2 3498 3 AAA93617 Aaa93617 Human se 3038 98.2 3498 8 ADA23280 Ada23280 cDNA enc 3032 98.0 4280 7 ABX71103 Abx71103 Novel hu 3025.6 97.8 4250 8 ADA23361 Ada23361 cDNA enc 2969.6 96.0 6060 4 AAH18729 Aah18729 Human cD

8	2746.2	88.8	3550	5	AAF98469	Aaf98469	Human cDN
9	2698	87.2	3333	3	AAA93618		Human sem
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11	2221.8	71.8	3039	5	AAS68807		DNA encod
12	2221.8	71.8	3039	5	AAS89721	Aas89721	DNA encod
13	2182.4	70.6	3041	4	AAH17625	Aah17625	Human cDN
14	1881.6	60.8	1890	3	AAA93630	Aaa93630	Human sem
15	1881.6	60.8	1890	8	ADA23359	Ada23359	cDNA enco
16	1881.6	60.8	1890	8	ADA23306		cDNA enco
17	1824.4	59.0	2293	4	AAH15834	Aah15834	Human cDN
18	1742.4	56.3	2227	4	AAK94365	Aak94365	Human ful
19	1666.4	53.9	2306	4	AAH17861	Aah17861	Human cDN
20	1592	51.5	2592	5	AAS68253		DNA encod
21	1462	47.3	2123	4	AAH13995		Human cDN
22	1367.2	44.2	4564	8	ACH03994		Human cDN
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27	758.6	24.5	814	4	AAK93983	Aak93983	Human cDN
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31	708.8	22.9	963	2	AAX84067	Aax84067	Degenerat
32	686.8	22.2	963	2	AAX84077	Aax84077	Degenerat
33	669	21.6	4234	6	ABA00055	Aba00055	CADHP-2 c
34	661.6	21.4	3205	6	ABS64380		Human sem
35	657.4	21.3	662	4	AAH08370	Aah08370	Human cDN
36	657.4	21.3	1923	4	AAH42598		Partial c
37	657.4	21.3	3694	4	AAH42597	=	Nucleotid
38	642	20.8	2191	6	ABS64381	Abs64381	Human sem
39	642	20.8	2359	6	ABS64383		Human sem
40	642	20.8	3196	6	ABS64382	Abs64382	Human sem
41	642	20.8	3364	6	ABS64384	Abs64384	Human sem
42	640.6	20.7	889	5	AAS68806	Aas68806	DNA encod
43	577.4	18.7	1896	6	ABS64379		Human sem
44	577.4	18.7	2014	6	AAD38696	Aad38696	Human LP2
45	570.8	18.5	786	4	AAH05233	Aah05233	Human cDN

ALIGNMENTS

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    AAD01233 standard; DNA; 3862 BP.
XX
AC
     AAD01233;
XX
     04-OCT-2000 (first entry)
DΤ
XX
     Human semaphorin 6A-1 cDNA.
DE
XX
     Human; semaphorin 6A-1; (HSA) SEMA6A-1; neuronal development; apoptosis;
KW
     neuronal regeneration; Ena/VASP protein family; immunomodulatory;
KW
     gene therapy; diagnostic agent; therapeutic agent; differentiation;
KW
     cytoskeletal stabilisation; plasticity; ds.
KW
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     Homo sapiens.
OS
XX
                     Location/Oualifiers
FH
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                     658. .3750
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FT
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FT
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FT
                     1 in claim 1"
FT
                     3532. .3747
FT
     misc feature
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FT
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FT
                     which selectively binds to members of Ena/VASP protein
FT
                     family"
FT
XX
     WO200031252-A1.
PN
XX
     02-JUN-2000.
PD
XX
                    99WO-EP009215.
     26-NOV-1999;
PF
XX
     26-NOV-1998;
                    98EP-00122441.
PR
XX
     (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
PA
XX
     Behl C. Klostermann A;
PΙ
XX
     WPI; 2000-400065/34.
DR
     P-PSDB; AAY71460.
DR
XX
     Nucleic acid coding for human semaphorin 6A-1 used as diagnostic agent,
PT
     therapeutic agent, for modulating immune system, in gene therapy or for
PT
     effecting differentiation, cytoskeletal stabilization and/or plasticity.
PT
XX
PS
     Claim 1; Fig 2; 53pp; English.
XX
     The present sequence is a cDNA encoding transmembranous human semaphorin
CC
     6A-1 ((HSA)SEMA6A-1) which is involved in neuronal development and
CC
     regeneration mechanisms during apoptosis. Semaphorin is a family of
CC
     proteins displaying secreted or transmembrane-based repulsive guidance
CC
     cues critically involved in neuronal development. The present sequence
CC
     was isolated from human 1-ZAP Express cDNA library which was screened
CC
     using a PCR fragment amplified from human neuroblastoma cell line SK-N-MC
CC
     cDNA. The (HSA)SEMA6A-1 protein contains a Zyxin-like domain that
CC
     selectively binds to members of Ena/VASP protein family especially Evl.
CC
     Expression of (HSA)SEMA6A-1 is highest in embryonic brain and kidney and
CC
     moderate in lung. The present sequence is useful as diagnostic and
CC
     therapeutic agents, for modulating the immune system, in gene therapy,
CC
     for effecting differentiation, cytoskeletal stabilisation and plasticity
CC
XX
     Sequence 3862 BP; 971 A; 1111 C; 967 G; 813 T; 0 U; 0 Other;
SQ
                           100.0%; Score 3093; DB 3; Length 3862;
  Query Match
                           100.0%; Pred. No. 0;
  Best Local Similarity
                                                                   0;
                                                                       Gaps
                                                                               0;
                                  0; Mismatches
                                                    0;
                                                        Indels
  Matches 3093; Conservative
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Db	718	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	777
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Db	778	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	837
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Db	838	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	897
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Db	898	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	957
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	958		1017
Qу	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	1018	111111111111111111111111111111111111	1077
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	1078	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	1137
QУ	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
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QУ	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
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QУ	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
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Db	1438	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1497
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Db	1558	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1617
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Qy	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1738	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1797
QУ		TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	
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	Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
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	Qу	2401	ACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
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	Qу	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
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XX
DT
    16-JAN-2001 (first entry)
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DE
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KW
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KW
    proliferation regulator; differentiation regulator; non-malignant tumour;
    immune disorder; autoimmune disease; transplant rejection; allergy; AIDS;
KW
KW
    infection; inflammatory disorder; arthritis; haematopoietic disorder;
KW
    skin disorder; cardiovascular disorder; atherosclerosis; restenosis;
KW
    neurological disease; Alzheimer's disease; trauma; wounding;
KW
    spinal cord injury; skeletal disorder; cytostatic; immunosuppressive;
KW
    anti-HIV; antiinflammatory; antiarthritic; antiarteriosclerotic;
KW
    neuroprotective; vulnerary; antiallergic; antimicrobial; cardiant;
KW
    dermatological; gene therapy; ds.
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ΡN
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PR
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XX
     (CURA-) CURAGEN CORP.
PA
XX
PΙ
     Shimkets RA;
XX
    WPI; 2000-594318/56.
DR
DR
     P-PSDB; AAB23030.
XX
PT
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PT
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PT
    pathological states such as cancer, immune, cardiovascular and
PT
    neurological disorders.
XX
PS
    Claim 3; Fig 2; 151pp; English.
XX
     Sequences AAA93616-A93631 and AAA93673-A93676 represent nucleic acids
CC
CC
    which encode human SECX proteins (AAB23029-B23048). The SECX proteins of
     the invention are either secreted or membrane-associated proteins and act
CC
CC
     as regulator of cellular proliferation and differentiation. SECX proteins
CC
     or nucleotides are useful for diagnosing the presence of, or
CC
    predisposition to, a disease associated with altered levels of SECX
CC
    proteins and nucleotides. The SECX proteins are also useful to screen
     compounds that modulate SECX activity or expression. The interaction of a
CC
CC
     SECX protein with other cellular proteins may be useful to modulate the
CC
     activity of a partner protein, cellular proliferation, cellular
CC
    differentiation and cell survival. SECX nucleotides are useful for the
CC
     recombinant expression of SECX protein, and may be used detect SECX mRNA
CC
     or genetic lesions in the SECX gene. They may also be used to modulate
CC
     SECX expression (e.g., using antisense oligonucleotides). SECX nucleic
CC
     acid sequences are also useful for identifying a cell or tissue type in a
CC
    biological sample, and in forensic biology. SECX primers or probes are
CC
     useful for detecting the presence of SECX nucleotides and for screening
CC
     tissue cultures for contamination. Diseases that may be treated or
CC
    prevented using SECX proteins or nucleotides include cancer (e.g.,
CC
     colorectal carcinoma, prostate cancer), benign tumours, immune disorders
CC
     (including autoimmune diseases, transplant rejection, allergies, AIDS),
CC
     infections, inflammatory disorders, arthritis, haematopoietic disorders,
CC
     skin disorders, cardiovascular disorders, atherosclerosis, restenosis,
CC
    neurological diseases (e.g., Alzheimer's disease), trauma (e.g., surgical
CC
     or traumatic wounds, spinal cord injury), and skeletal disorders
XX
SQ
     Sequence 3498 BP; 917 A; 966 C; 889 G; 725 T; 0 U; 1 Other;
                          98.2%; Score 3038; DB 3; Length 3498;
 Query Match
                          99.3%; Pred. No. 0;
 Best Local Similarity
```

Matches 3072; Conservative 0; Mismatches 21; Indels

2; Gaps

2;

QУ	1	ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC	60
Db	214	ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC	273
Qу	61	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	120
Db	274	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	333
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
Db	334	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	393
QУ	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	394	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	453
QУ	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	454	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	513
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	514	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	573
QУ	361	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	420
Db	574	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTTGTCTGTGGAACTAATGCCTTC	633
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	634	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	693
QУ	481	GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	694	GGAATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	753
QУ	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	754	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	813
QУ	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	814	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	873
QУ	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	874	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	933
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	934	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	993
QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	994	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1053

Qy Db		TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
Qу		GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	
Db	1114		1173
Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1174		1233
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1293
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1294		1353
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354		1413
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1414	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1473
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474	${\tt ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG}$	1533
Qу		GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	
Db	1534	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1593
Qу			1440
Db		AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	
Qу		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
Db		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
QУ		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
Db		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
Qу		TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Db		TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
QУ		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
Db		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1/40

Db	1894	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1953
Qу	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGGTATGAGTCTAGG	1800
Db	1954	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	2013
Qу	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
Db	2014	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	2073
Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	2074	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	2133
Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	2134	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2193
QУ	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2194	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2253
Qу	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2254	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2313
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2314	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2373
Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2374	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2433
Qу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2434	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2493
ДĀ	2281	ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAAC	2340
Db	2494	ACCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGCGCG	2553
QΆ	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2554	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2613
Qу	2401	ACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2614	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2673
Qу	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2674	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGACCAAAATGAGCGAGGTGGCCCAG	2733
Qу	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580

```
2734 ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC 2793
Db
       2581 AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA 2640
Qу
           2794 AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCCAAA 2853
Db
       2641 GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA 2700
Qу
           2854 GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA 2913
Db
       2701 AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2760
Qу
           2914 AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2973
Db
       2761 CCCACGACTCGCTCACGAGAAGCCACCAGGCCACC-ACTCTCAAAAGAAACAACACTAA 2819
Qy
           2974 CCCACGAACTCGCTCACGAGAAGCCACCTGACCACCTACTCATCAGAAGCAACACTAA 3033
Db
       2820 CTCCTCCAATTCCTCTC-ACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGC 2878
Qy
                                3034 CCCCGACAATTCANCTCTGACTTCAAAGGGACCAGAGCTTTGGCAGGGGAGACAACCCGC 3093
Db
       2879 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 2938
Qy
           3094 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 3153
Db
       2939 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 2998
Qу
           3154 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 3213
Db
       2999 TGAAGCGTACGCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3058
Qу
           3214 TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3273
Db
       3059 CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3093
Qу
           3274 CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3308
Db
RESULT 3
ADA23280
    ADA23280 standard; cDNA; 3498 BP.
ID
XX
AC
    ADA23280;
XX
DT
    20-NOV-2003 (first entry)
XX
    cDNA encoding human SECX polypeptide, SEC2.
DE
XX
    Human; secreted polypeptide; membrane-associated polypeptide; SECX; SEC1;
KW
    SEC2; SEC3; SEC4; SEC5; SEC6; SEC7; SEC8; SEC9; SEC10; SEC11; SEC12;
KW
    SEC13; SEC14; SEC15; SECX-associated disorder; lung cancer;
KW
    cardiovascular disease; oncology disease; immune disorder;
KW
    autoimmune disease; transplant rejection; allergy; AIDS; infections;
KW
    inflammatory disorder; arthritis; haematopoietic disorder; skin disorder;
ΚW
    atherosclerosis; restenosis; neurological disease; Alzheimer's disease;
KW
    trauma; wounds; spinal cord injury; skeletal disorder; cytostatic;
KW
```

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antiinflammatory; immunosuppressive; anti-HIV; antiarthritic;
KW
    antiarteriosclerotic; cardiant; neuroprotective; nootropic; vulnerary;
KW
KW
    antiallergic; cardiant; dermatological; gene; ss.
XX
OS
    Homo sapiens.
XX
    US2003054514-A1.
PN
XX
PD
    20-MAR-2003.
XX
    19-SEP-2001; 2001US-00957187.
PF
XX
                   99US-0123667P.
PR
    09-MAR-1999;
    04-JAN-2000; 2000US-0174485P.
PR
    08-MAR-2000; 2000US-00520781.
PR
    19-SEP-2000; 2000US-0233798P.
PR
    20-SEP-2000; 2000US-0234082P.
PR
XX
    (SHIM/) SHIMKETS R A.
PA
    (LARO/) LAROCHELLE W J.
PA
XX
PI
    Shimkets RA, Larochelle WJ;
XX
DR
    WPI; 2003-540616/51.
DR
    P-PSDB; ADA23281.
XX
    New SECX nucleic acids, useful for treating or diagnosing a disorder
PT
    e.g., lung cancer, cardiovascular and oncology diseases, immune disorder,
PT
    and autoimmune disease.
PT
XX
    Claim 3; Fig 2; 118pp; English.
PS
XX
CC
    The present invention relates to the isolation of human secreted or
    membrane-associated (SECX) polypeptides designated SEC1-SEC15, and the
CC
    polynucleotide sequences encoding them. Also disclosed is a method for
CC
    screening for a modulator of activity or latency of SECX. The SECX
CC
    polypeptide and polynucleotide sequences may be used for treating or
CC
    preventing SECX-associated disorders such as lung cancer, cardiovascular
CC
CC
    and oncology diseases, immune disorders, autoimmune diseases, transplant
CC
     rejection, allergy, AIDS, infections, inflammatory disorders, arthritis,
CC
    haematopoietic disorders, skin disorders, atherosclerosis, restenosis,
CC
    neurological diseases (e.g. Alzheimer's disease), trauma, wounds, spinal
     cord injuries, and skeletal disorders. The present sequence encodes a
CC
CC
    SECX polypeptide of the invention.
XX
     Sequence 3498 BP; 917 A; 966 C; 889 G; 725 T; 0 U; 1 Other;
SQ
                                Score 3038; DB 8; Length 3498;
 Query Match
                         98.2%;
                                Pred. No. 0;
                         99.3%;
  Best Local Similarity
                               0; Mismatches
                                                              2; Gaps
                                                                          2;
 Matches 3072; Conservative
                                                21; Indels
           1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qу
             214 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 273
Db
          61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qy
```

Db	274	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	333
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
Db	334	TTTGTGGGCCACAGGCCAGGACGGAACACCACAGAGGCACAGGCTGGACATCCAGATG	393
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	394	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	453
Qу	241	ATAGACACTCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	454	ATAGACACACACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	513
Qу		CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db		CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	573
Qy	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	574	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	633
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	634	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	693
Qу	481	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTTTTGCAGATGGA	540
Db	694	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	753
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	754	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	813
Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	814	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	873
Qу		TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	
Db		TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	934	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	993
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	994	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1053
QУ	·	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
Db		TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
QУ		GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	
Db	1114	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1173

Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATTGCCAGTGTTTTTACT	1020
Db	1174	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1233
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1293
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1294	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1353
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1413
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1414	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1473
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1533
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1534	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1593
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1594		1653
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1654	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGCAGCAGCAGCTCTCTGTAT	1713
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1714	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1773
Qy	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1774	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1833
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1834	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1893
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1894	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1953
Qу	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	1800
Db	1954	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	2013

_	1.001		1000
Qу		GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	
Db	2014	GGAGGAATGCTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	2073
Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	2074	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	2133
Qy	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	2134	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2193
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2194	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2253
QУ	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2254	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCCGGGGCTCCATGAGC	2313
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2314	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2373
QУ	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2374	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2433
Qу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2434	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2493
Qy	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGGCAGTGGGAGAGCAAC	2340
Db	2494	ACCCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGGCACCCGCGAGTGGGAGAGGAAC	2553
Qy	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2554	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2613
QУ	2401	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2614	ACGGACCTGCCCCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGCTCCTGCCCATC	2673
Qy	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2674	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2733
Qу	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580
Db	2734	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2793
Qу	2581	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2640
Db	2794	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2853
Qу	2641	GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2700

.

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2854 GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA 2913
Db
       2701 AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2760
Qу
           2914 AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2973
Db
       2761 CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACC-ACTCTCAAAAGAACAACACTAA 2819
Qу
           2974 CCCACGAACTCGCTCACGAGAAGCCACCTGACCACCTACTCTCATCAGAAGCAACACTAA 3033
Db
       2820 CTCCTCCAATTCCTCTC-ACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGC 2878
Qу
                                 3034 CCCCGACAATTCANCTCTGACTTCAAAGGGACCAGAGCTTTGGCAGGGGAGACAACCCGC 3093
Db
       2879 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 2938
Qy
           3094 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 3153
Db
       2939 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 2998
Qу
           3154 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 3213
Db
       2999 TGAAGCGTACGCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3058
Qy
           3214 TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3273
Db
       3059 CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3093
Qу
           3274 CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3308
Db
RESULT 4
ABX71103
    ABX71103 standard; cDNA; 4280 BP.
ID
ХX
AC
    ABX71103;
XX
DT
    05-MAR-2003
              (first entry)
XX
DΕ
    Novel human cDNA sequence #328.
XX
    Human; gene; ss; nervous system disorder; peripheral neuropathy;
KW
    Huntington's disease; amyotrophic lateral sclerosis; haemophilia;
KW
KW
    neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
    autoimmune disease; systemic lupus erythematosus; rheumatoid arthritis;
KW
    insulin-dependent diabetes mellitus; anaemia; thrombocytopaenia; wound;
KW
    ulcer; burn; bone disorder; osteoporosis; osteoarthritis; stroke;
KW
    fibrosis; reperfusion injury; infection; allergic rhinitis; asthma;
ΚW
    coagulation disorder; cancer; tumour; inflammatory disease; septic shock;
KW
    Crohn's disease; anaphylaxis; proliferation; chemotactic;
KW
    differentiation; stem cell growth factor; haematopoiesis; chemokinetic;
KW
KW
    haemostatic; antiinflammatory; expressed sequence tag; EST.
XX
OS
    Homo sapiens.
XX
PN
    WO200281731-A2.
```

```
XX
    17-OCT-2002.
PD
XX
    29-JAN-2002; 2002WO-US001222.
PF
XX
     30-JAN-2001; 2001US-00774528.
PR
XX
     (HYSE-) HYSEQ INC.
PA
     (GOOD/) GOODRICH R W.
PA
XX
PΙ
    Tang TY, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA, Ren F;
ΡI
    Xue AJ, Yang Y, Wehrman T, Wang J, Wang D,
                                                   Drmanac RT;
XX
    WPI; 2003-058563/05.
DR
XX
PT
    Novel polypeptide useful for treating neurodegenerative diseases, myeloid
    or lymphoid cell disorders, bone disorders, mechanical and traumatic
PT
PT
    disorders, coagulation disorders, and inflammatory diseases.
XX
PS
    Claim 1; Page; 612pp; English.
XX
CC
    This invention relates to the cDNA sequences encoding an isolated novel
    human polypeptide. The protein encoded by the nucleic acid of the
CC
CC
     invention is useful for treating central and peripheral nervous system
    diseases (e.g. peripheral neuropathy, Huntington's disease, amyotrophic
CC
CC
     lateral sclerosis); neurodegenerative diseases (e.g. Parkinson's disease,
CC
    Alzheimer's disease); autoimmune disease (e.g. systemic lupus
CC
    erythematosus, rheumatoid arthritis, insulin-dependent diabetes mellitus)
     ; myeloid or lymphoid cell disorders (e.g. anaemia and thrombocytopaenia)
CC
     ; wounds, ulcers, burns; bone disorders (e.g. osteoporosis,
CC
CC
    osteoarthritis); mechanical and traumatic disorders (e.g. stroke, head
CC
     trauma); lung or liver fibrosis; reperfusion injury in various tissues;
CC
    bacterial, viral or fungal infections; allergic conditions such as
CC
    allergic rhinitis, asthma; coaqulation disorders (e.g. haemophilia);
CC
    cancer and tumours; and inflammatory diseases (e.g. septic shock, Crohn's
CC
    disease, anaphylaxis). The protein may be used to inhibit the growth,
     infection or function of infectious agents such as bacteria, fungi,
CC
CC
    viruses, or to effect bodily characteristics, biorhythms or circadian
CC
     cycles of rhythms. The protein may also have
CC
    proliferation/differentiation, stem cell growth factor, haematopoiesis
CC
     regulation, immune stimulating or suppressing, chemotactic/chemokinetic,
CC
    haemostatic and thrombolytic, receptor/ligand, and antiinflammatory
CC
     activities. The cDNA sequences of the invention are useful for expressing
CC
     recombinant protein for analysis. The present sequence represents a novel
CC
    human cDNA sequence of the invention, this sequence is an expressed
CC
     sequence tag (EST) and was identified using subtractive hybridisation
XX
     Sequence 4280 BP; 1185 A; 1165 C; 1001 G; 929 T; 0 U; 0 Other;
SO
                                 Score 3032; DB 7; Length 4280;
  Query Match
                         98.0%;
  Best Local Similarity
                         98.4%;
                                 Pred. No. 0;
 Matches 3093; Conservative
                                0; Mismatches
                                                  0; Indels
                                                               51; Gaps
                                                                            1;
            1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qу
              Db
         267 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 326
```

Qγ	61	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	120
Db	327	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG	386
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
Db	387	TTTGTGGGCCACAGGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	446
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	447	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	506
Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	507	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	566
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	567	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	626
Qу	361	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	420
Db	627	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	686
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	687	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	746
Qу	481	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	747	GGAATGCCCAGATGCCCAAACATGCCCAACGTTGCACTGTTTGCAGATGGA	806
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	807	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	866
Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	867	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	926
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	927	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	986
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	987	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	1046
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1047	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1106
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1107	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1166
Ov	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960

Db	1167	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1226
Qу	961	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1227	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1286
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1287	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1346
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1347	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1406
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1407	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1466
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1467	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1526
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1527	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1586
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1587	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1646
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1647	${\tt AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT}$	1706
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1707	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1766
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1767	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1826
Qу	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1827	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1886
Qy	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1887	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1946
Qy	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1947	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749

Db	2007	$\tt CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG$	2066
Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2067	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2126
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2127	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGGCAGTGTCT	2186
QУ	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2187	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2246
Qу	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2247	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2306
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2307	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2366
Qy	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2367	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2426
Qy	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2427	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2486
QУ	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2487	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2546
QУ	2230	AAAGCAGACCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2289
Db	2547	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2606
Qу	2290	CTGCAGCAGAAGCCGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAAGCAGAACCTC	2349
Db	2607	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAGCAACCTC	2666
QУ	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db		ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	
Qy	2410	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	2469
Db	2727	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2786
Qу		GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	
Db		GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	
QУ		GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	
Db	2847	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2906

```
2590 CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG 2649
QУ
          2907 CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG 2966
Db
      Qy
          Db
      2710 CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGGGCTACCCCACGAAC 2769
Qу
          3027 CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC 3086
Db
      2770 TCGCTCACGAGAAGCCACCAGGCCACCTCTCAAAAGAAACAACACTAACTCCTCCAAT 2829
QУ
          3087 TCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACACACTAACTCCTCCAAT 3146
Db
      Qу
          3147 TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCC 3206
Db
      2890 CAGAGGGTGGACTCCAGCTGCAGGTGCACAGCTCTCGGCCAGGCCGTGACTGTC 2949
Qу
          3207 CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 3266
Db
      2950 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3009
Qy
          3267 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3326
Db
      3010 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3069
Qу
          3327 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3386
Db
      3070 AAGCCCAATGATGCGTGTACATAA 3093
Qу
          3387 AAGCCCAATGATGCGTGTACATAA 3410
Dh
RESULT 5
ADA23361
   ADA23361 standard; cDNA; 4250 BP.
XX
AC
   ADA23361;
XX
DT
   20-NOV-2003 (first entry)
XX
DE
   cDNA encoding human SECX polypeptide, SEC15.
XX
   Human; secreted polypeptide; membrane-associated polypeptide; SECX; SEC1;
KW
   SEC2; SEC3; SEC4; SEC5; SEC6; SEC7; SEC8; SEC9; SEC10; SEC11; SEC12;
KW
KW
   SEC13; SEC14; SEC15; SECX-associated disorder; lung cancer;
   cardiovascular disease; oncology disease; immune disorder;
KW
   autoimmune disease; transplant rejection; allergy; AIDS; infections;
ΚW
   inflammatory disorder; arthritis; haematopoietic disorder; skin disorder;
ΚW
   atherosclerosis; restenosis; neurological disease; Alzheimer's disease;
   trauma; wounds; spinal cord injury; skeletal disorder; cytostatic;
KW
   antiinflammatory; immunosuppressive; anti-HIV; antiarthritic;
KW
```

```
antiarteriosclerotic; cardiant; neuroprotective; nootropic; vulnerary;
KW
    antiallergic; cardiant; dermatological; gene; ss.
KW
XX
    Homo sapiens.
OS
XX
    US2003054514-A1.
PN
XX
PD
    20-MAR-2003.
XX
PF
    19-SEP-2001; 2001US-00957187.
XX
PR
    09-MAR-1999;
                   99US-0123667P.
    04-JAN-2000; 2000US-0174485P.
PR
    08-MAR-2000; 2000US-00520781.
PR
    19-SEP-2000; 2000US-0233798P.
PR
    20-SEP-2000; 2000US-0234082P.
PR
XX
PΑ
     (SHIM/) SHIMKETS R A.
     (LARO/) LAROCHELLE W J.
PΑ
XX
PI
    Shimkets RA, Larochelle WJ;
XX
    WPI; 2003-540616/51.
DR
DR
    P-PSDB; ADA23362.
XX
    New SECX nucleic acids, useful for treating or diagnosing a disorder
PT
     e.g., lung cancer, cardiovascular and oncology diseases, immune disorder,
PΤ
     and autoimmune disease.
PT
XX
     Claim 3; Page 13-14; 118pp; English.
PS
XX
     The present invention relates to the isolation of human secreted or
CC
    membrane-associated (SECX) polypeptides designated SEC1-SEC15, and the
CC
     polynucleotide sequences encoding them. Also disclosed is a method for
CC
     screening for a modulator of activity or latency of SECX. The SECX
CC
     polypeptide and polynucleotide sequences may be used for treating or
CC
     preventing SECX-associated disorders such as lung cancer, cardiovascular
CC
     and oncology diseases, immune disorders, autoimmune diseases, transplant
CC
     rejection, allergy, AIDS, infections, inflammatory disorders, arthritis,
CC
     haematopoietic disorders, skin disorders, atherosclerosis, restenosis,
CC
CC
     neurological diseases (e.g. Alzheimer's disease), trauma, wounds, spinal
CC
     cord injuries, and skeletal disorders. The present sequence encodes a
CC
     SECX polypeptide of the invention.
XX
     Sequence 4250 BP; 1168 A; 1161 C; 995 G; 926 T; 0 U; 0 Other;
SQ
                                Score 3025.6; DB 8; Length 4250;
  Query Match
                         97.8%;
  Best Local Similarity
                         98.3%;
                                Pred. No. 0;
  Matches 3089; Conservative
                                0; Mismatches
                                                 4;
                                                     Indels
                                                             51; Gaps
                                                                          1;
           1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qγ
             250 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 309
Db
           61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qу
              310 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATTGCAACTATACAAAACAGTATCCGGTG 369
Db
```

QУ	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
Db	370	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	429
Qу	181	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	240
Db	430	, , , , , , , , , , , , , , , , , , , ,	489
Qy	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	490	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	549
Qу	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	550		609
Qу	361	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	420
Db	610	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	669
Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	670	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	729
Qy	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	730	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	789
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	790	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	849
Qy	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	850	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	909
QУ	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	910	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	969
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	970	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	1029
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1030		1089
Qу	841.	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090		1149
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150		1209

QУ	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1269
Qy	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1389
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1510	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1569
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1570	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1629
QУ	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1630	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1689
QУ	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1690	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1749
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1750	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1809
Qу	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1810	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1870	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1929
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db		AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
Ov	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809

Db	2050	CCCAGCACACCACCATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2109
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2169
ДУ	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
Qу	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2290	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2349
QУ	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2409
QУ	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410	AAGCTCAGCGGCCTCTTTGGGGACACTCATCCAAAAGACCCAAAGCCGGAGGCCATCCTC	2469
QУ	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2470	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2529
Qу	2230	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2289
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Qу	2290	CTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCGAGTGGGAAGCAGAACCTC	2349
Db	2590	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAGCAGAACCTC	2649
Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	
Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	
QУ	2410	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2710	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2769
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db ·	2770	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2829
Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
Db	2830	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2889
Qу	2590	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2649

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Db
      2890 CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG 2949
Qy
      Db
      2710 CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC 2769
Qy
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Db
      Qу
         3070 TCGCTCACGAGAAGCCACCACGCCACCCTCTCAAAAGAAACAACACTAACTCCTCCAAT 3129
Db.
      2830 TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGGAGACAACCCGCCGCCCCCC 2889
Qу
         3130 TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCC 3189
Db
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Qу
         3190 CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 3249
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      2950 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3009
Qу
         3250 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3309
Db
      3010 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3069
Qy
         3310 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3369
Db
      3070 AAGCCCAATGATGCGTGTACATAA 3093
Qу
         3370 AAGCCCAATGATGCGTGTACATAA 3393
Db
RESULT 6
AAH18729
   AAH18729 standard; cDNA; 6060 BP.
XX
AC
   AAH18729;
XX
DT
   26-JUN-2001 (first entry)
XX
DΕ
   Human cDNA sequence SEQ ID NO:19004.
XX
KW
   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS
   Homo sapiens.
XX
   EP1074617-A2.
ΡN
XX
PD
   07-FEB-2001.
XX
PF
   28-JUL-2000; 2000EP-00116126.
XX
PR
   29-JUL-1999;
             99JP-00248036.
PR
   27-AUG-1999;
             99JP-00300253.
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11-JAN-2000; 2000JP-00118776.
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    02-MAY-2000; 2000JP-00183767.
PR
    09-JUN-2000; 2000JP-00241899.
PR
XX
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PA
XX
    Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PΙ
PΤ
    Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR
    WPI: 2001-318749/34.
XX
РΤ
    Primer sets for synthesizing polynucleotides, particularly the 5602 full-
    length cDNAs defined in the specification, and for the detection and/or
PT
PT
    diagnosis of the abnormality of the proteins encoded by the full-length
PΤ
    cDNAs.
XX
    Claim 8; SEQ ID NO 19004; 2537pp + Sequence Listing; English.
PS
XX
    The present invention describes primer sets for synthesising 5602 full-
CC
    length cDNAs defined in the specification. Where a primer set comprises:
CC
     (a) an oligo-dT primer and an oligonucleotide complementary to the
CC
    complementary strand of a polynucleotide which comprises one of the 5602
CC
CC
    nucleotide sequences defined in the specification, where the
CC
    oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC
    of an oligonucleotide comprising a sequence complementary to the
    complementary strand of a polynucleotide which comprises a 5'-end
CC
CC
    sequence and an oligonucleotide comprising a sequence complementary to a
    polynucleotide which comprises a 3'-end sequence, where the
CC
    oligonucleotide comprises at least 15 nucleotides and the combination of
CC
    the 5'-end sequence/3'-end sequence is selected from those defined in the
CC
CC
     specification. The primer sets can be used in antisense therapy and in
    gene therapy. The primers are useful for synthesising polynucleotides,
CC
CC
    particularly full-length cDNAs. The primers are also useful for the
CC
    detection and/or diagnosis of the abnormality of the proteins encoded by
CC
    the full-length cDNAs. The primers allow obtaining of the full-length
    cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC
CC
    AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC
    represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC
    oligonucleotides, all of which are used in the exemplification of the
CC
    present invention
XX
SQ
     Sequence 6060 BP; 1639 A; 1526 C; 1363 G; 1532 T; 0 U; 0 Other;
                         96.0%; Score 2969.6; DB 4; Length 6060;
 Query Match
 Best Local Similarity
                         99.8%; Pred. No. 0;
 Matches 2994; Conservative
                                0; Mismatches
                                                               2; Gaps
                                                                           2;
                                                 4; Indels
          96 CAACTATACAAAACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACA 155
Qу
             1 \>\> \mathsf{CAACTATACAAAACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACA} \>\> 60
Db
         156 GAGGCACAGGCTGGACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGC 215
Qу
             61 GAGGCACAGGCTGGACATCCAGGTGATTATGATCATGAACGGAACCCTCTACATTGCTGC 120
Db
         216 TAGGGACCATATTTATACTGTTGATATAGACACATCACACACGGAAGAAATTTATTGTAG 275
Qv
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Db	121	${\tt TAGGGACCATATTTATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAG}$	180
Qу	276	CAAAAAACTGACATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAA	335
Db	181	CAAAAAACTGACATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAA	240
QУ	336	ACATAAGGATGAGTGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATT	395
Db	241	ACATAAGGATGAGTGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATT	300
Qу	396	GTTTGTCTGTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATT	455
Db	301	GTTTGTCTGTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATT	360
Qу	456	GGAACCATTCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGC	515
Db	361	GGAACCATTCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGC	420
Qу	516	CAACGTTGCACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	575
Db	421	CAACGTTGCACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	480
Qу	576	CATTGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCA	635
Db	481	CATTGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCA	540
Qу	636	CGATTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATAT	695
Db	541	CGATTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATAT	600
QУ	696	CTACTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCC	755
Db	601	$\tt CTACTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCC$	660
Qу	756	AAGAGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACA	815
Db	661	AAGAGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACA	720
Qу	816	GTGGACGTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTA	875
Db	721	$\tt GTGGACGTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTA$	780
Qу	876	TTTCAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCT	935
Db	781	${\tt TTTCAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCT}$	840
QУ	936	GGCAACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACAT	995
Db	841	GGCAACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACAT	900
Qу		GCTTGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCAC	
Db		GCTTGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCAC	
Qy 3	1056	CTGGACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTC	1115
Db	961	$\tt CTGGACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTC$	1020

QΫ	1110	ATCCTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCAT	11/5
Db	1021	ATCCTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCAT	1080
Qу	1176	CAAGACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCT	1235
Db	1081	CAAGACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCT	1140
QУ	1236	GAGAACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATA	1295
Db	1141	GAGAACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATA	1200
QУ	1296	TCAGAATCACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGC	1355
Db	1201	TCAGAATCACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGC	1260
Qу	1356	CAGAATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTA	1415
Db	1261	CAGAATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTA	1320
QУ	1416	CAACTCTG-AAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGC	1474
Db	1321	CAACTCTGAAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGC	1380
Qу	1475	TGGACAGAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCC	1534.
Db	1381	TGGACAGAGCAAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCC	1440
Qу	1535	TTGGCCGGTGTGAACGACATGGGAAGTGT-AAAAAAACCTGTATTGCCTCCAGAGACCCA	1593
Db	1441	TTGGCCGGTGTGAACGACATGGGAAGTGTAAAAAAAACCTGTATTGCCTCCAGAGACCCA	1500
QУ	1594	TATTGTGGATGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTG	1653
Db	1501	TATTGTGGATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTG	1560
QУ	1654	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCC	1713
Db	1561	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCC	1620
QУ	1714	TTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG	1773
Db	1621	TTTGTGGCACTGAATGGGCATTCTAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG	1680
Qу	1774	ACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGAC	1833
Db	1681	ACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGAC	1740
QУ	1834	TCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAG	1893
Db	1741	TCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAG	1800
Qу	1894	GGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTG	1953
Db	1801	GGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTG	1860

Qу	1954	GCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTAC	2013
Db	1861	GCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTAC	1920
QУ	2014	TGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTC	2073
Db	1921	TGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAAGAAGGAGCTC	1980
Qу	2074	ACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGAC	2133
Db	1981	ACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGAC	2040
Qу	2134	ACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAG	2193
Db	2041	ACTCAATCCGAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAG	2100
Qу	2194	CTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGAC	2253
Db	2101	CTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACTAGCACCACCTGGAC	2160
Qу	2254	CTGACGGCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGC	2313
Db	2161	CTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGC	2220
Qу	2314	CGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACATG	2373
Db	2221	CGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACATG	2280
QУ	2374	CCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCAC	2433
Db	2281	CCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCAC	2340
Qу	2434	ATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGAC	2493
Db	2341	ATCCCCAGCGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGAC	2400
Qу	2494	CAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAG	2553
Db	2401	CAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAG	2460
Qу	2554	TATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTG	2613
Db	2461	TATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTG	2520
Qу	2614	GAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCG	2673
Db	2521	GAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCG	2580
Qу	2674	GGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCC	2733
Db	2581	GGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCC	2640
Qу	2734	TACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGCC	2793
Db	2641	TACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGCC	2700
Qу	2794	ACCACTCTCAAAAGAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAG	2853

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Db
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           Db
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QУ
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Qу
           2881 TACAACTCACTGACAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCC 2940
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Qу
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RESULT 7
AAV44295
   AAV44295 standard; cDNA; 3550 BP.
XX
AC
   AAV44295;
XX
   06-OCT-1998 (first entry)
DT
XX
   Human secreted protein clone CJ145 1 cDNA.
DΕ
XX
    Secreted protein; human fetal brain; nutrition; cytokine; stimulant;
KW
    cell proliferation; differentiation; immune system; suppressor; ligand;
KW
    regulator; hematopoiesis; tissue growth; activin; inhibin; haemostatic;
KW
    chemotaxis; chemokinetic; thrombosis; receptor; cadherin; tumour;
KW
KW
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XX
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OS
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FΗ
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PN
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PD
    25-JUN-1998.
XX
               97WO-US023330.
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XX
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               97US-00783401.
PR
    13-JAN-1997;
PR
    16-DEC-1997;
               97US-00991872.
XX
PΑ
    (GEMY ) GENETICS INST INC.
XX
    Jacobs K, Mccoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;
PΤ
```

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PI
    Spaulding V, Agostino MJ;
XX
    WPI; 1998-362774/31.
DR
    P-PSDB; AAW64221.
DR
XX
    New polynucleotides and secreted proteins - obtained from human foetal
PT
    brain, human adult testes, human adult brain and human adult salivary
РΤ
    gland cDNA libraries.
РΤ
XX
PS
    Claim 17a; Page 69-71; 110pp; English.
XX
   This sequence encodes a novel secreted protein from clone CJ145 1
CC
    isolated from a human fetal brain cDNA library. This protein has
CC
    applications for nutritional use, cytokine and cell
CC
    proliferation/differentiation activity, immune stimulating or suppressing
CC
    activity, hematopoiesis regulating activity, tissue growth activity,
CC
    activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC
    and thrombotic activity, receptor/ligand activity, anti-inflammatory
CC
    activity, cadherin/tumour invasion suppressor activity, tumour inhibition
CC
CC
    activity and other activities
XX
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 Query Match
 Best Local Similarity
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 Matches 2923; Conservative
                         1; Mismatches
                                       4; Indels 165; Gaps
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Db
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Qy
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           306 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 365
Db
        241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300
Qу
           366 ATAGACACATCACACAGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 425
Db
        301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360
Qу
           426 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 485
Db
        Qу
           Db
        421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480
Qy
```

Db	546	${\tt AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC}$	605
Qy	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	606	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	665
Qy	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	666	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	725
QY	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	726	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	785
QУ	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	786	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	845
QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	846	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	905
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	906	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	965
Qy	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	966	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1025
Qy	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1026	GATGTGATCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1085
QУ	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1086	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1145
Qy	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1146	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1205
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1206	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1265
Qy	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1266	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1325
Qy	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1326	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1385
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1386	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1445

Qу	1321	GGATCAGAGAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	T380
Db	1446	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1505
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1506	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1565
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1566	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1625
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1626	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1685
Qу	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1686	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1745
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1746	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1805
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1806	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAAT	1853
Qу	1741	${\tt TCCCTCTTGCCCAGCACCACCACCATCAGATTCGACGGCTCAAGAGGGGGTATGAGTCTAGG}$	1800
Db	1854		1853
Qу	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
Db	1854		1853
QУ	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	1854	GGAGTGATTCGGGAAAGTTACCTCAAA	1880
Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	1881	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1940
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	1941	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2000
Qу	2041	GTGGCTGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2001	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2060
Qy	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2061	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2120

Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2121	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2180
Qy	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2181	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2240
Qy	2281	ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCGGGAGTGGGAGAGGAAC	2340
Db	2241	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGCAAC	2300
Qу	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2301	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2360
Qу	2401	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2361	ACGGACCTGCCCCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGCTCCTGCCCATC	2420
QУ	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2421	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2480
Qу	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580
Db	2481	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATTTCAGC	2540
QУ	2581	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2640
Db	2541	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2600
QУ	2641	GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2700
Db	2601	GTTCCACAGCGGGAGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTTTCAGACCGGTTTA	2660
QУ	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2760
Db	2661	AGCAAGCGGCTGGAAATGCACCACTCCTTTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2720
Qλ		CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAAC	
Db		CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAAC	
ДÀ		TCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCG	
Db		TCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCG	
QУ		CCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCC	
Db		CCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCC	
Qу		GTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTG	
Db	2901	GTGACTGTCTCGAGGCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTG	2960
Qv	3001	AAGCGTACGCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCC	3060

```
2961 AAGCGTACGCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCC 3020
Db
        3061 ACATCCATGAAGCCCAATGATGCGTGTACATAA 3093
QУ
             3021 ACATCCATGAAGCCCAATGATGCGTGTACATAA 3053
Db
RESULT 8
AAF98469
    AAF98469 standard; cDNA; 3550 BP.
XX
    AAF98469;
AC
XX
    07-JUN-2001 (first entry)
DT
XX
    Human cDNA clone CJ145 1 sequence SEQ ID 160.
DE
XX
    Human; secreted protein; nutrient; cytokine modulator; proliferation;
KW
KW
    differentiation; immune system modulator; tissue growth; chemotactic;
KW
    haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ss;
    haematopoiesis.
KW
XX
OS
    Homo sapiens.
XΧ
    WO200119988-A1.
PN
XX
    22-MAR-2001.
PD
XX
    14-SEP-2000; 2000WO-US025135.
PF
XX
    17-SEP-1999; 99US-00398829.
PR
XX
     (GEMY ) GENETICS INST INC.
PΑ
XX
    Jacobs K, Mccoy JM, Lavallie ER, Collins-Racie LA, Evans C;
PΙ
PΤ
    Merberg D, Treacy M, Bowman MR, Spaulding V, Agostino MJ;
XX
DR
    WPI: 2001-244801/25.
DR
    P-PSDB; AAB90731.
XX
PT
    Isolated nucleic acids encoding polypeptides, useful for modulating e.g.
PT
    cytokine and cell proliferation/differentiation activity, the immune
РΤ
    system and hematopoiesis regulating activity.
XX
PS
    Disclosure; Page 486-487; 557pp; English.
XX
CC
    Human cDNA clones represented in AAF98374 - AAF98489 encode secreted
CC
    proteins AAB90667 - AAB90750. The cDNA clones are isolated from various
CC
    tissue types, and may be used in the prevention, treatment and diagnosis
    of diseases associated with inappropriate protein expression. The
CC
    polypeptides and nucleic acids may be used as nutrients or to modulate
CC
    cytokine and cell proliferation/differentiation activity and may also be
    involved in modulation of the immune system. The cDNA sequences,
CC
CC
    proteins, their agonists and/or antagonists exhibit haematopoiesis
    regulating activity; tissue growth activity; activin/inhibin activity;
CC
    chemotactic/chemokinetic activity; haemostatic and thrombolytic activity;
CC
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CC
   activity; cadherin/tumour suppressor activity; and/or tumour inhibition
   activity. Included in the invention are probes represented in AAF98490 -
CC
CC
   AAF98572 which are specific for the cDNA clones encoding the secreted
CC
   proteins
XX
SO
   Sequence 3550 BP; 957 A; 994 C; 856 G; 742 T; 0 U: 1 Other:
 Query Match
                   88.8%; Score 2746.2; DB 5; Length 3550;
 Best Local Similarity
                   94.5%; Pred. No. 0;
 Matches 2923; Conservative
                        1: Mismatches
                                      4; Indels 165; Gaps
                                                         1:
         1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qу
          126 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 185
Db
        61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qу
          186 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 245
Db
       121 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 180
Qy
          246 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 305
Db
       181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240
Qy
          306 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 365
Db
       241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300
Qy
          366 ATAGACACATCACACSGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 425
Db
       301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360
Qу
          426 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 485
Db
       361 ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTTGTCTGTGGAACTAATGCCTTC 420
Qу
          Db
       421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGGATGAATTCAGC 480
Qy
          546 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 605
Db
       481 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540
Qу
          606 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 665
Db
       541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600
Qγ
          666 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 725
Db
       601 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 660
Qу
          Db
       726 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 785
       661 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 720
Qy
```

receptor/ligand activity; anti-inflammatory activity; haematopoiesis

CC

Db	786		845
Qγ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	846		905
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	906		965
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	966		1025
QУ	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1026		1085
Qу	961	AGCATCCCTGGGTCTGCCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1086	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1145
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1146	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1205
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1206	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1265
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1266	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1325
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1326	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1385
QУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1386	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1445
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1446	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1505
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1506	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1565
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1566	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAGCTCTCTGTAT	1625
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	

Db	1626	$\tt GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG$	1685
Qу	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1686	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1745
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1746		1805
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1806	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAAT	1853
Qу	1741	${\tt TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG}$	1800
Db	1854		1853
Qу	1801	${\tt GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG}$	1860
Db	1854		1853
Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	1854	GGAGTGATTCGGGAAAGTTACCTCAAA	1880
Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	1881	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1940
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	1941	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2000
Qу	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2001	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2060
QУ	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2061	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2120
QY	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2121	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2180
QУ	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2181	ATGCTCATTAAAGCAGACCAGCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2240
QУ	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCGCG	2340
Db	2241	ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGCAAC	2300
Qу	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2301		2360

i

Qу	2401	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2361	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACCTCCCAGCGTGGTGGTCCTGCCCATC	2420
Qу	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2421	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2480
Qу	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580
Db	2481		2540
Qу	2581	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2640
Db	2541	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2600
Qу	2641	GTTCCACAGCGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2700
Db	2601		2660
Qу	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2760
Db	2661	AGCAAGCGGCTGGAAATGCACCACTCCTTTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2720
Qу	2761	CCCACGAACTCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACAACACTAAC	2820
Db	2721		2780
Qу	2821	TCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCG	2880
Db	2781	TCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCG	2840
Qу	2881	CCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCC	2940
Db	2841	CCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCC	2900
QУ	2941	GTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTG	3000
Db	2901		2960
Qу	3001	AAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCC	3060
Db	2961	AAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCC	3020
QУ	3061	ACATCCATGAAGCCCAATGATGCGTGTACATAA 3093	
Db	3021		
RESU	T.ጥ ዓ		
AAA9			
ID	AAA93618	standard; DNA; 3333 BP.	

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AAA93618
ID AAA93618 standard; DNA; 3333 BP.
XX
AC AAA93618;
XX
DT 16-JAN-2001 (first entry)
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XX Human semaphorin protein-like splice variant SECX 2864933-2 DNA. DE XX SECX protein; human; secreted; membrane-associated; cancer; KW proliferation regulator; differentiation regulator; non-malignant tumour; KW immune disorder; autoimmune disease; transplant rejection; allergy; AIDS; KW infection; inflammatory disorder; arthritis; haematopoietic disorder; KW skin disorder; cardiovascular disorder; atherosclerosis; restenosis; KW neurological disease; Alzheimer's disease; trauma; wounding; KW spinal cord injury; skeletal disorder; cytostatic; immunosuppressive; KW KW anti-HIV; antiinflammatory; antiarthritic; antiarteriosclerotic; neuroprotective; vulnerary; antiallergic; antimicrobial; cardiant; KW KW dermatological; gene therapy; ds. XX OS Homo sapiens. XX W0200053742-A2. PNXX 14-SEP-2000. PD XX 09-MAR-2000; 2000WO-US006280. PFXX 09-MAR-1999; 99US-0123667P. PR08-MAR-2000; 2000US-0520781P. PR XX (CURA-) CURAGEN CORP. PAXX ΡI Shimkets RA; XX WPI; 2000-594318/56. DR DR P-PSDB; AAB23031. XX Novel human membrane associated or secreted polypeptides and PTpolynucleotides useful for diagnosis, prevention and treatment of PTpathological states such as cancer, immune, cardiovascular and PTPTneurological disorders. XX PS Claim 3; Fig 3; 151pp; English. XX Sequences AAA93616-A93631 and AAA93673-A93676 represent nucleic acids CC CC which encode human SECX proteins (AAB23029-B23048). The SECX proteins of CC the invention are either secreted or membrane-associated proteins and act as regulator of cellular proliferation and differentiation. SECX proteins CC CC or nucleotides are useful for diagnosing the presence of, or predisposition to, a disease associated with altered levels of SECX CC CC proteins and nucleotides. The SECX proteins are also useful to screen CC compounds that modulate SECX activity or expression. The interaction of a CC SECX protein with other cellular proteins may be useful to modulate the

CC activity of a partner protein, cellular proliferation, cellular CC differentiation and cell survival. SECX nucleotides are useful for the CCrecombinant expression of SECX protein, and may be used detect SECX mRNA CC or genetic lesions in the SECX gene. They may also be used to modulate CC SECX expression (e.g., using antisense oligonucleotides). SECX nucleic acid sequences are also useful for identifying a cell or tissue type in a CC biological sample, and in forensic biology. SECX primers or probes are CC useful for detecting the presence of SECX nucleotides and for screening CC tissue cultures for contamination. Diseases that may be treated or CC

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prevented using SECX proteins or nucleotides include cancer (e.g.,
CC
   colorectal carcinoma, prostate cancer), benign tumours, immune disorders
CC
   (including autoimmune diseases, transplant rejection, allergies, AIDS),
CC
   infections, inflammatory disorders, arthritis, haematopoietic disorders,
CC
   skin disorders, cardiovascular disorders, atherosclerosis, restenosis,
CC
   neurological diseases (e.g., Alzheimer's disease), trauma (e.g., surgical
CC
   or traumatic wounds, spinal cord injury), and skeletal disorders
CC
XX
   Sequence 3333 BP; 874 A; 921 C; 845 G; 692 T; 0 U; 1 Other;
SO
 Query Match
                   87.2%;
                         Score 2698; DB 3; Length 3333;
                   93.9%;
                         Pred. No. 0;
 Best Local Similarity
 Matches 2907; Conservative
                        0: Mismatches
                                     21;
                                        Indels 167; Gaps
                                                         3;
         1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qу
          214 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 273
Db
        61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qу
          274 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 333
Db
       121 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 180
Qу
          334 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 393
Db
       181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240
Qу
          394 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 453
Db
       241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300
Qγ
          454 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 513
Db
       301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360
Qy
          514 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 573
Dh
       Qу
          Db
       421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480
Qу
          634 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 693
Db
       481 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540
Qy
          694 GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 753
Db
       541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600
Qy
          754 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 813
Db
       601 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 660
Qy
          814 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 873
Db
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QУ	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	720
Db	874	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	933
QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	934	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	993
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	994	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1053
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1054		1113
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1114		1173
Qу	961	AGCATCCC1GCG1C1G1CCC1III G1CCT1CIII G1CCTICII G1CCTICIII G1CCTICII	1020
Db	1174		1233
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1293
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1294	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1353
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354		1413
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1414		1473
QУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474		1533
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1534		1593
Qy	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1594		1653
QУ	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1654		1713

Qy		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
Db		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Qу		TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Db			
Qу		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
Db	1834	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1893
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1894		1941
Qу	1741	${\tt TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG}$	1800
Db	1942		1941
Qy	1801	${\tt GGAGGAATGCTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG}$	1860
Db	1942		1941
Qу	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	1942	GAGTGATTCGGGAAAGTTACCTCAAA	1968
QУ	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	1969	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2028
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2029	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2088
QУ	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2089		2148
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2149		2208
Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2209	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2268
QУ	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2269		2328
Qу	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCGAGTGGGAGAGCAAC	2340
Db	2329		2388
Qy	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400

Db	2389		2448
Qу	2401	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2449		2508
Qy	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2509		2568
QУ	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580
Db	2569		2628
Qу	2581	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2640
Db	2629		2688
QУ	2641	GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2700
Db	2689	GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2748
Qу	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2760
Db	2749		2808
QУ	2761	CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACC-ACTCTCAAAAGAAACAACACTAA	2819
Db	2809	CCCACGAACTCGCTCACGAGAAGCCACCTGACCACCTACTCTCATCAGAAGCAACACTAA	2868
Qу	2820	CTCCTCCAATTCCTCTC-ACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGC	2878
Db	2869	CCCCGACAATTCANCTCTGACTTCAAAGGGACCAGAGCTTTGGCAGGGGAGACAACCCGC	2928
QУ	2879	CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG	2938
Db	2929	CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG	2988
QУ	2939	CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC	2998
Db	2989	CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC	3048
Qy	2999	TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT	3058
Db	3049	TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT	3108
Qу	3059	CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3093	
Db	3109	CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3143	

RESULT 10 ADA23282

ID ADA23282 standard; cDNA; 3333 BP.

XX

AC ADA23282;

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XX
DT
     20-NOV-2003 (first entry)
XX
DΕ
     cDNA encoding human SECX polypeptide, SEC3 #1.
XX
     Human; secreted polypeptide; membrane-associated polypeptide; SECX; SEC1;
KW
     SEC2; SEC3; SEC4; SEC5; SEC6; SEC7; SEC8; SEC9; SEC10; SEC11; SEC12;
KW
     SEC13; SEC14; SEC15; SECX-associated disorder; lung cancer;
KW
     cardiovascular disease; oncology disease; immune disorder;
KW
     autoimmune disease; transplant rejection; allergy; AIDS; infections;
KW
KW
     inflammatory disorder; arthritis; haematopoietic disorder; skin disorder;
     atherosclerosis; restenosis; neurological disease; Alzheimer's disease;
KW
KW
     trauma; wounds; spinal cord injury; skeletal disorder; cytostatic;
     antiinflammatory; immunosuppressive; anti-HIV; antiarthritic;
KW
KW
     antiarteriosclerotic; cardiant; neuroprotective; nootropic; vulnerary;
KW
     antiallergic; cardiant; dermatological; gene; ss.
XX
OS
     Homo sapiens.
XX
PN
     US2003054514-A1.
XX
PD
     20-MAR-2003.
XX
     19-SEP-2001; 2001US-00957187.
PF
XX
     09-MAR-1999;
                    99US-0123667P.
PR
     04-JAN-2000; 2000US-0174485P.
PR
     08-MAR-2000; 2000US-00520781.
PR
PR
     19-SEP-2000; 2000US-0233798P.
     20-SEP-2000; 2000US-0234082P.
PR
XX
     (SHIM/) SHIMKETS R A.
PA
PΑ
     (LARO/) LAROCHELLE W J.
XX
PI
     Shimkets RA, Larochelle WJ;
XX
DR
     WPI; 2003-540616/51.
DR
     P-PSDB; ADA23283.
XX
PT
     New SECX nucleic acids, useful for treating or diagnosing a disorder
PT
     e.g., lung cancer, cardiovascular and oncology diseases, immune disorder,
PT
     and autoimmune disease.
XX
PS
     Claim 3; Fig 3; 118pp; English.
XX
CC
     The present invention relates to the isolation of human secreted or
CC
     membrane-associated (SECX) polypeptides designated SEC1-SEC15, and the
CC
     polynucleotide sequences encoding them. Also disclosed is a method for
CC
     screening for a modulator of activity or latency of SECX. The SECX
CC
     polypeptide and polynucleotide sequences may be used for treating or
CC
     preventing SECX-associated disorders such as lung cancer, cardiovascular
CC
     and oncology diseases, immune disorders, autoimmune diseases, transplant
CC
     rejection, allergy, AIDS, infections, inflammatory disorders, arthritis,
CC
     haematopoietic disorders, skin disorders, atherosclerosis, restenosis,
CC
     neurological diseases (e.g. Alzheimer's disease), trauma, wounds, spinal
CC
     cord injuries, and skeletal disorders. The present sequence encodes a
CC
     SECX polypeptide of the invention.
```

SQ Sequence 3333 BP; 874 A; 921 C; 845 G; 692 T; 0 U; 1 Other;

87.2%; Score 2698; DB 8; Query Match Length 3333; 93.9%; Best Local Similarity Pred. No. 0: Matches 2907: Conservative Mismatches 0; 21; Indels 167; 3; 1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60 Qy 214 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 273 Db 61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120 Qу 274 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 333 Db 121 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 180 Qу 334 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 393 Db 181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240 QУ 394 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 453 Db 241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300 Qу 454 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 513 Db 301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360 Qу 514 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 573 Db Qу Db 421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480 Qу 634 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 693 Db 481 GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540 Qу 694 GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 753 Db 541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600 Qу 754 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 813 Db 601 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 660 Qу 814 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 873 Db 661 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 720 Qу 874 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 933 Db 721 GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT 780 Qу

Db	934	$\tt GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT$	993
QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	994		1053
Qy	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1054	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1113
QУ	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1114	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1173
QУ	961	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1174	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1233
QУ	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1293
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1294	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1353
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1413
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1414	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1473
QУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474	${\tt ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG}$	1533
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1534	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1593
QУ	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1594	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1653
QУ		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
Db	1654	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1713
QУ	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1714	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1773
QУ		TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Db	1774	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1833

Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1834	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1893
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1894	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAAT	1941
Qу	1741	${\tt TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG}$	1800
Db	1942		1941
Qу	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
Db	1942		1941
Qy		GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	
Db	1942	GGAGTGATTCGGGAAAGTTACCTCAAA	1968
Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	1969	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2028
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2029	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2088
Qy	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100
Db	2089	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2148
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2149	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2208
Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2209	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2268
Qу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2269	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2328
Qy	2281	ACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCGGGAGTGGGAGAGGAAC	2340
Db	2329	ACCCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGGCACCCGCGAGTGGGAGAGGAAC	2388
ДĀ	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2389	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2448
Qу	2401	ACGGACCTGCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2449	ACGGACCTGCCCCTGCGGGCCTCCCCAGCCACCCCAGCGTGGTGGTCCTGCCCATC	2508

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2461 ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG 2520
Qу
          2509 ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG 2568
Db
      2521 ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC 2580
Qу
          2569 ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC 2628
Db
      2581 AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA 2640
Qу
          2629 AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCCAAA 2688
Db
      2641 GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA 2700
Qу
          2689 GTTCCACAGGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA 2748
Db
      2701 AGCAAGCGGCTGGAAATGCACCACTCTTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2760
QУ
          2749 AGCAAGCGGCTGGAAATGCACCACTCTTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2808
Db
      2761 CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACC-ACTCTCAAAAGAAACAACACTAA 2819
Qy
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      2820 CTCCTCCAATTCCTCTC-ACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGC 2878
Qу
                               \Box
          2869 CCCCGACAATTCANCTCTGACTTCAAAGGGACCAGAGCTTTGGCAGGGGAGACAACCCGC 2928
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      2879 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 2938
Qу
          2929 CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG 2988
Db
      2939 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 2998
Qу
          2989 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 3048
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      2999 TGAAGCGTACGCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3058
Qу
          3049 TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT 3108
Db
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Qу
          3109 CCACATCCATGAAGCCCAATGATGCGTGTACATAA 3143
Db
RESULT 11
AAS68807
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ID AAS68807 standard; cDNA; 3039 BP.
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XX

AC AAS68807;

XX

DT 13-FEB-2002 (first entry)

XX

DE DNA encoding novel human diagnostic protein #4611.

XX KW

Human; chromosome mapping; gene mapping; gene therapy; forensic;

KW food supplement; medical imaging; diagnostic; genetic disorder; ss.

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XX
os
    Homo sapiens.
XX
ΡN
    WO200175067-A2.
XX
    11-OCT-2001.
PD
XX
PF
    30-MAR-2001; 2001WO-US008631.
XX
    31-MAR-2000; 2000US-00540217.
PR
    23-AUG-2000; 2000US-00649167.
PR
XX
PΑ
     (HYSE-) HYSEQ INC.
XX
PΙ
    Drmanac RT, Liu C, Tang YT;
XX
    WPI; 2001-639362/73.
DR
    P-PSDB; ABG04620.
DR
XX
    New isolated polynucleotide and encoded polypeptides, useful in
РΤ
PT
    diagnostics, forensics, gene mapping, identification of mutations
PT
     responsible for genetic disorders or other traits and to assess
PT
    biodiversity.
XX
    Claim 1; SEQ ID NO 4611; 103pp; English.
PS
XX
     The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC
     sequences. (I) is useful as hybridisation probes, polymerase chain
CC
     reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC
     and in recombinant production of (II). The polynucleotides are also used
CC
     in diagnostics as expressed sequence tags for identifying expressed
CC
     genes. (I) is useful in gene therapy techniques to restore normal
CC
     activity of (II) or to treat disease states involving (II). (II) is
CC
     useful for generating antibodies against it, detecting or quantitating a
CC
     polypeptide in tissue, as molecular weight markers and as a food
CC
     supplement. (II) and its binding partners are useful in medical imaging
CC
     of sites expressing (II). (I) and (II) are useful for treating disorders
CC
     involving aberrant protein expression or biological activity. The
CC
     polypeptide and polynucleotide sequences have applications in
CC
     diagnostics, forensics, gene mapping, identification of mutations
CC
CC
     responsible for genetic disorders or other traits to assess biodiversity
CC
     and to produce other types of data and products dependent on DNA and
CC
     amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC
     coding sequences of the invention. Note: The sequence data for this
CC
     patent did not appear in the printed specification, but was obtained in
CC
     electronic format directly from WIPO at
CC
     ftp.wipo.int/pub/published pct sequences
XX
SQ
     Sequence 3039 BP; 741 A; 869 C; 781 G; 648 T; 0 U; 0 Other;
                         71.8%;
                                Score 2221.8; DB 5; Length 3039;
  Query Match
  Best Local Similarity
                         91.2%;
                                Pred. No. 0;
  Matches 2408; Conservative
                               0; Mismatches
                                              167; Indels
                                                                  Gaps
                                                                          2;
         519 CGTTGCACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTTGCCTTGCCAT 578
Qy
             Db
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Qу	579	TGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGA	638
Db	459	${\tt TGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGA}$	518
Qу	639	TTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTA	698
Db	519	TTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTA	578
Qу	699	CTTCTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAG	758
Db	579	CTTCTTCTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAG	638
Qу	759	AGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTG	818
Db	639	AGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTG	698
Qу	819	GACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTT	878
Db	699		758
Qу	879	CAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGC	938
Db	759		818
QУ	939	AACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCT	998
Db	819	AACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCT	878
Qу	999	TGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTG	1058
Db	879	TGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTG	938
Qу	1059	GACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATC	1118
Db	939		998
QУ	1119	CTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAA	1178
Db	999		1058
Qу	1179	GACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAG	1238
Db	1059		1118
Qy	1239	AACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCA	1298
Db	1119		1178
Qу	1299	GAATCACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAG	1358
Db	1179		1238
Qy	1359	AATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAA	1418
Db	1239		1298

QУ	1419	CTCTGAAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGA	14/8
Db	1299	CTCTGAAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGA	1358
Qy	1479	CAGAGCAAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGG	1538
Db	1359	CAGAGCAAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGG	1418
Qу	1539	CCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTG	1598
Db	1419		1478
Qу	1599	TGGATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTG	1653
Db	1479	TGGATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGGACACAGAG	1538
Qу	1654	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCC	1713
Db	1539		1598
Qу	1714	TTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG	1773
Db	1599		1658
Qу	1774	ACGGCTCAAGAGGGGTATGAG	1794
Db	1659	AGGGGGTGAGAGGGGAAAGTGCACACTTAACCATTTCGAGTTAGGTTACTGGTTGCCTGT	1718
QУ	1795	TCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGA	1832
Db	1719		1778
Qу	1833	CTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAA	1892
Db	1779	CAGACGGAGGCTCCGGTGGCCACAAGGGGGTCGTCGGAAAAGATCCCAACTGGAAGCCCA	1838
Qу	1893	GGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTT	1952
Db	1839	GAGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTT	1898
QУ	1953	GGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTA	2012
Db	1899	GGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTA	1958
QУ	2013	CTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCT	2072
Db	1959	CTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCT	2018
Qy	2073	CACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGA	2132
Db	2019		2078
Qy	2133	CACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAA	2192
Db	2079		2138
Ov	2193	GCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGA	2252

Db	2139	GCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGA	2198
Qу	2253	CCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAG	2312
Db	2199	CCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAG	2258
Qу	2313	CCGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACAT	2372
Db	2259		2318
Qу	2373	GCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCA	2432
Db	2319		2378
Qу	2433	CATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGA	2492
Db	2379	CATCCCCAGCGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGA	2438
Qу	2493	CCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGA	2552
Db	2439	CCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGA	2498
Qу	2553	GTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGT	2612
Db	2499	GTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGT	2558
Qy	2613	GGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGAGGCCTCCCTGGGTCCCCC	2672
Db	2559	GGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGAGGCCTCCCTGGGTCCCCC	2618
QУ	2673	GGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTC	2732
Db	2619	GGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTC	2678
QУ	2733	CTACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGC	2792
Db	2679	CTACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGC	2738
Qу	2793	CACCACTCTCAAAAGAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCA	2852
Db	2739	CACCACTCTCAAAAGAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCA	2798
Qу	2853	GAGCTTTGGCAGGGGAGACAACCCGCCGCCCGCCCGCAGAGGGTGGACTCCATCCA	2912
Db	2799	GAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCCCCAGAGGGTGGACTCCATCCA	2858
Qy	2913	GCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGC	2972
Db	2859	GCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGC	2918
Qy	2973	CTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACC	3032
Db	2919	CTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACC	2978
Qy	3033	CCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATGAAGCCCAATGATGCGTGTACATA	3092

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Qy
              1
         3039 A 3039
Db
RESULT 12
AAS89721
    AAS89721 standard; cDNA; 3039 BP.
ID
XX
AC
    AAS89721;
XX
    13-FEB-2002 (first entry)
DT
XX
     DNA encoding novel human diagnostic protein #25525.
DΕ
XX
     Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW
     food supplement; medical imaging; diagnostic; genetic disorder; ss.
KW
XX
OS
    Homo sapiens.
XX
    WO200175067-A2.
PN
XX
PD
     11-OCT-2001.
XX
     30-MAR-2001; 2001WO-US008631.
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XX
     31-MAR-2000; 2000US-00540217.
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     23-AUG-2000; 2000US-00649167.
PR
XX
PA
     (HYSE-) HYSEQ INC.
XX
     Drmanac RT, Liu C, Tang YT;
PΙ
XX
     WPI; 2001-639362/73.
DR
     P-PSDB; ABG25534.
DR
XX
PT
     New isolated polynucleotide and encoded polypeptides, useful in
     diagnostics, forensics, gene mapping, identification of mutations
PT
PT
     responsible for genetic disorders or other traits and to assess
PT
     biodiversity.
XX
     Claim 1; SEQ ID NO 25525; 103pp; English.
PS
XX
     The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC
     sequences. (I) is useful as hybridisation probes, polymerase chain
CC
CC
     reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
     and in recombinant production of (II). The polynucleotides are also used
CC
     in diagnostics as expressed sequence tags for identifying expressed
CC
     genes. (I) is useful in gene therapy techniques to restore normal
CC
     activity of (II) or to treat disease states involving (II). (II) is
CC
     useful for generating antibodies against it, detecting or quantitating a
CC
     polypeptide in tissue, as molecular weight markers and as a food
CC
     supplement. (II) and its binding partners are useful in medical imaging
CC
     of sites expressing (II). (I) and (II) are useful for treating disorders
CC
     involving aberrant protein expression or biological activity. The
CC
```

```
diagnostics, forensics, gene mapping, identification of mutations
CC
   responsible for genetic disorders or other traits to assess biodiversity
CC
   and to produce other types of data and products dependent on DNA and
CC
   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC
   coding sequences of the invention. Note: The sequence data for this
CC
   patent did not appear in the printed specification, but was obtained in
CC
   electronic format directly from WIPO at
CC
CC
   ftp.wipo.int/pub/published pct sequences
XX
   Sequence 3039 BP; 741 A; 869 C; 781 G; 648 T; 0 U; 0 Other;
SO
                   71.8%;
                         Score 2221.8; DB 5;
                                          Length 3039;
 Query Match
 Best Local Similarity
                   91.2%; Pred. No. 0;
                        0; Mismatches
 Matches 2408; Conservative
                                    167;
                                         Indels
                                                66;
                                                    Gaps
                                                          2;
       Qy
             Db
       579 TGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGA 638
Qу
          459 TGACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGA 518
Db
       639 TTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTA 698
Qу
          519 TTCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTA 578
Db
       699 CTTCTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAG 758
Qy
          579 CTTCTTCTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAG 638
Db
       759 AGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTG 818
Qу
          639 AGTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTG 698
Db
       819 GACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTT 878
Qу
          699 GACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTT 758
Db
       879 CAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGC 938
Qу
          759 CAACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGC 818
Db
       939 AACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCT 998
Qу
          819 AACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCT 878
Db
       999 TGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTG 1058
Qy
          879 TGACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTG 938
Db
      1059 GACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATC 1118
Qу
          939 GACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATC 998
Db
      1119 CTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAA 1178
Qy
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polypeptide and polynucleotide sequences have applications in

CC

Db	999	CTCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAA	1058
Qу	1179	GACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAG	1238
Db	1059	GACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAG	1118
Qу	1239	AACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCA	1298
Db	1119		1178
Qу	1299	GAATCACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAG	1358
Db	1179	GAATCACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAG	1238
Qу	1359	AATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAA	1418
Db	1239		1298
Qу	1419	CTCTGAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGA	1478
Db	1299	CTCTGAAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGA	1358
Qу	1479	CAGAGCAAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGG	1538
Db	1359	CAGAGCAAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGG	1418
Qу	1539	CCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTG	1598
Db	1419	CCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTG	1478
Qу	1599	TGGATGGATAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTG	1653
Db	1479	TGGATGGATAAAGGAAGGTGCTGCCTGCAGCCATTTATCACCCAACAGCAGGACACAGAG	1538
QУ	1654	ACTTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCC	1713
Db	1539	AGGCTTTGTTGTCTTTGTGGTCACCGGGTCCACTTTACACAGATGCCTATTAATCACTTC	1598
QУ	1714	TTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCG	1773
Db	1599	ACTATGGAGACAGACATCCATCATATCACAGCAGCTCAGAAACGGGCCGTCCAGTGAA	1658
Qу	1774	ACGGCTCAAGAGGGGTATGAG	1794
Db	1659	AGGGGGTGAGAGGGGAAAGTGCACACTTAACCATTTCGAGTTAGGTTACTGGTTGCCTGT	1718
QУ	1795	TCTAGGGGAGGAATGCTGGAAGCATCTGCTTGA	1832
Db	1719	GTCTTACACGCTTAGGGTGGTAATTGGGGTGGGTTGCTTAAAAGGCAAACACTTTTCCC	1778
Qу	1833	CTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAA	1892
Db	1779	CAGACGGAGGCTCCGGTGGCCACAAGGGGGTCGTCGGAAAAGATCCCAACTGGAAGCCCA	1838
QУ	1893	GGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTT	1952

Db	1839	GAGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTT	1898
Qу	1953	GGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTA	2012
Db	1899	GGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTA	1958
QУ	2013	CTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCT	2072
Db	1959	CTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCT	2018
QУ	2073	CACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGA	2132
Db	2019	CACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGA	2078
Qу	2133	CACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAA	2192
Db	2079	CACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAA	2138
Qy	2193	GCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGA	2252
Db	2139	GCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGA	2198
Qу	2253	CCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAG	2312
Db	2199	CCTGACGGCCCTCCCCAGCCCAGAGTCAACCCCAACGCTGCAGCAGAAGCCGGAAGCCCAG	2258
Qу	2313	CCGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACAT	2372
Db	2259	$\tt CCGCGGCAGCCGCGAGTGGGAGGAGGAACCAGAACCTCATCAATGCCTGCACAAAGGACAT$	2318
Qу	2373	GCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCA	2432
Db		GCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCA	
Qy	2433	CATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGA	2492
Db	2379	CATCCCCAGCGTGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGA	2438
QУ	2493	CCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGA	2552
Db	2439	CCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGA	2498
Qу	2553	GTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGT	2612
Db	2499	GTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGT	2558
Qу	2613	GGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCC	2672
Db	2,559	GGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCC	2618
Qу	2673	GGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTC	2732
Db	2619	GGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTC	2678
QУ	2733	CTACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGC	2792
Db	2679	CTACGGGGTTGACTATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGC	2738

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Qу
          2739 CACCACTCTCAAAAGAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCA 2798
Db
      Qy
          Db
      2913 GCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGC 2972
Qу
          2859 GCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGC 2918
Db
      2973 CTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACC 3032
QУ
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Db
      3033 CCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATGAAGCCCAATGATGCGTGTACATA 3092
QУ
          2979 CCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATGAAGCCCAATGATGCGTGTACATA 3038
Db
      3093 A 3093
QУ
          Db
      3039 A 3039
RESULT 13
AAH17625
   AAH17625 standard; cDNA; 3041 BP.
ID
XX
AC
   AAH17625;
XX
DT
   26-JUN-2001 (first entry)
XX
DE
   Human cDNA sequence SEQ ID NO:17153.
XX
   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
KW
XX
OS
   Homo sapiens.
XΧ
PN
   EP1074617-A2.
XX
PD
   07-FEB-2001.
XX
PF
   28-JUL-2000; 2000EP-00116126.
XX
PR
   29-JUL-1999;
              99JP-00248036.
PR
   27-AUG-1999;
              99JP-00300253.
   11-JAN-2000; 2000JP-00118776.
PR
   02-MAY-2000; 2000JP-00183767.
PR
   09-JUN-2000; 2000JP-00241899.
PR
XX
PΑ
   (HELI-) HELIX RES INST.
XX
   Ota T, Isoqai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
   Ishii S, Suqiyama T, Wakamatsu A, Nagai K, Otsuki T;
PΤ
XX
```

DR WPI; 2001-318749/34. XX PTPrimer sets for synthesizing polynucleotides, particularly the 5602 fulllength cDNAs defined in the specification, and for the detection and/or PT diagnosis of the abnormality of the proteins encoded by the full-length PTPTcDNAs. XX Claim 8; SEQ ID NO 17153; 2537pp + Sequence Listing; English. PS XX CC The present invention describes primer sets for synthesising 5602 full-CC length cDNAs defined in the specification. Where a primer set comprises: CC (a) an oligo-dT primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 CC CC nucleotide sequences defined in the specification, where the oligonucleotide comprises at least 15 nucleotides; or (b) a combination CC CC of an oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end CC CC sequence and an oligonucleotide comprising a sequence complementary to a CC polynucleotide which comprises a 3'-end sequence, where the CC oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the CC CC specification. The primer sets can be used in antisense therapy and in CC gene therapy. The primers are useful for synthesising polynucleotides, CC particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by CC the full-length cDNAs. The primers allow obtaining of the full-length CCCC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 CC represent human amino acid sequences; and AAH13629 to AAH13632 represent CC oligonucleotides, all of which are used in the exemplification of the CC CC present invention XX Sequence 3041 BP; 804 A; 886 C; 714 G; 637 T; 0 U; 0 Other; SQ Query Match 70.6%; Score 2182.4; DB 4; Length 3041; 100.0%; Best Local Similarity Pred. No. 0; Matches 2183; Conservative 0; Mismatches 1; Indels Gaps 0; 910 CGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAACAGCATCCCT 969 Qу 1 CGTATCAACGGGCATGATGTTGTCCTGGCAACGTTTTCTACACCTTATAACAGCATCCCT 60 Db 970 GGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACTGGGAGATTC 1029 Qу 61 GGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACTGGGAGATTC 120 Db 1030 AAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGAGTTCCTAAG 1089 Qy 121 AAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGAGTTCCTAAG 180 Db 1090 CCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACCTCCAATGAG 1149 Qy 181 CCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACCTCCAATGAG 240 Db 1150 TTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAGGCAGTGCCC 1209 Qу

Db

Qу	1210	TCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTTACCAAAATT	1269
Db	301	TCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTTACCAAAATT	360
Qу	1270	GCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTGGGATCAGAG	1329
Db	361	GCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTGGGATCAGAG	420
Qу	1330	AAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTAAATGACAGC	1389
Db	421	AAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTAAATGACAGC	480
Qу	1390	CTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGATGGAGTCGAA	1449
Db	481	CTTTTCCTGGAGGAGTGATGATGTTTACAACTCTGAAAAATGCAGCTATGATGGAGTCGAA	540
Qу	1450	GACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1509
Db	541	GACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAGCAGCTCTCTGTATGTTGCGTTC	600
Qу	1510	TCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAGTGTAAAAAA	1569
Db	601	TCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAGTGTAAAAAA	660
Qу	1570	ACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGATAAAGGAAGG	1629
Db	661	ACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGATAAAGGAAGG	720
Qу	1630	CATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGCAATACAGAT	1689
Db	721	CATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGCAATACAGAT	780
Qу	1690	GGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTG	1749
Db	781	GGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGTTCCCTCTTG	840
Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	841	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	900
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	901	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	960
QУ	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	961	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1020
QУ	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	1021	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1080
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	1081	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	1140

Qу	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC 210	9
Db	1141	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC 120	0
Qу	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC 216	9
Db	1201	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC 126	0
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT 222	9
Db	1261	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT 132	0
Qу	2230	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	9
Db	1321	AAAGCAGACCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG 138	0
Qу	2290	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAGCAACCTC 234	9
Db	1381	CTGCAGCAGAAGCCCAGCCGCGCGCAGCCGCGAGTGGGAGAGCAACCTC 144	0
Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG 240	9
Db	1441	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG 150	0
Qу	2410	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG 246	9
Db	1501	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGCTCCTGCCCATCACGCAGCAG 156	0
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG 252	9
Db	1561	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG 162	0
Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT 258	9
Db	1621	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT 168	0
QУ	2590	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCCAAAGTTCCACAG 264	9
Db	1681	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG 174	0
QУ	2650	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	9
Db	1741	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	0
QУ	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC 276	9
Db	1801	CTGGAAATGCACCACTCCTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC 186	0
QУ	2770	TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT 282	9
Db	1861		0
Qу	2830	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG 288	9
Db	1921		0
Qу	2890	CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 294	9

```
1981 CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC 2040
Db
        2950 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 3009
Qу
            2041 TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG 2100
Db
        3010 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3069
Qу
            2101 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 2160
Db
        3070 AAGCCCAATGATGCGTGTACATAA 3093
Qу
            2161 AAGCCCAATGATGCGTGTACATAA 2184
Db
RESULT 14
AAA93630
    AAA93630 standard; cDNA; 1890 BP.
XX
    AAA93630;
AC
XX
    16-JAN-2001 (first entry)
DT
XX
    Human semaphorin protein-like splice variant SECX pCR2.1-2864933 cDNA.
DE
XX
    SECX protein; human; secreted; membrane-associated; cancer;
KW
    proliferation regulator; differentiation regulator; non-malignant tumour;
ΚW
    immune disorder; autoimmune disease; transplant rejection; allergy; AIDS;
KW
    infection; inflammatory disorder; arthritis; haematopoietic disorder;
KW
    skin disorder; cardiovascular disorder; atherosclerosis; restenosis;
KW
    neurological disease; Alzheimer's disease; trauma; wounding;
KW
    spinal cord injury; skeletal disorder; cytostatic; immunosuppressive;
KW
    anti-HIV; antiinflammatory; antiarthritic; antiarteriosclerotic;
KW
    neuroprotective; vulnerary; antiallergic; antimicrobial; cardiant;
KW
    dermatological; gene therapy; ss.
KW
XX
OS
    Homo sapiens.
XX
    WO200053742-A2.
PN
XX
PD
    14-SEP-2000.
XX
PF
    09-MAR-2000; 2000WO-US006280.
XX
PR
    09-MAR-1999;
                  99US-0123667P.
    08-MAR-2000; 2000US-0520781P.
PR
XX
PA
    (CURA-) CURAGEN CORP.
XX
PI
    Shimkets RA;
XX
DR
    WPI; 2000-594318/56.
DR
    P-PSDB; AAB23043.
XX
РT
    Novel human membrane associated or secreted polypeptides and
РΤ
    polynucleotides useful for diagnosis, prevention and treatment of
```

pathological states such as cancer, immune, cardiovascular and neurological disorders.

PT XX PS

PT

Claim 3; Fig 15; 151pp; English.

XX CC

Sequences AAA93616-A93631 and AAA93673-A93676 represent nucleic acids which encode human SECX proteins (AAB23029-B23048). The SECX proteins of the invention are either secreted or membrane-associated proteins and act as regulator of cellular proliferation and differentiation. SECX proteins or nucleotides are useful for diagnosing the presence of, or predisposition to, a disease associated with altered levels of SECX proteins and nucleotides. The SECX proteins are also useful to screen compounds that modulate SECX activity or expression. The interaction of a SECX protein with other cellular proteins may be useful to modulate the activity of a partner protein, cellular proliferation, cellular differentiation and cell survival. SECX nucleotides are useful for the recombinant expression of SECX protein, and may be used detect SECX mRNA or genetic lesions in the SECX gene. They may also be used to modulate SECX expression (e.g., using antisense oligonucleotides). SECX nucleic acid sequences are also useful for identifying a cell or tissue type in a biological sample, and in forensic biology. SECX primers or probes are useful for detecting the presence of SECX nucleotides and for screening tissue cultures for contamination. Diseases that may be treated or prevented using SECX proteins or nucleotides include cancer (e.g., colorectal carcinoma, prostate cancer), benign tumours, immune disorders (including autoimmune diseases, transplant rejection, allergies, AIDS), infections, inflammatory disorders, arthritis, haematopoietic disorders, skin disorders, cardiovascular disorders, atherosclerosis, restenosis, neurological diseases (e.g., Alzheimer's disease), trauma (e.g., surgical or traumatic wounds, spinal cord injury), and skeletal disorders

CC XX SO

Db

Sequence 1890 BP; 535 A; 426 C; 463 G; 466 T; 0 U; 0 Other;

Query Match 60.8%; Score 1881.6; DB 3; Length 1890; Best Local Similarity 99.8%; Pred. No. 0; Matches 1884; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

49 GGGGCTGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAA 108 Qу Db 1 GGATCCGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAA 60 Qу Db 169 GACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATT 228 Qу 121 GACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATT 180 Db 229 TATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACA 288 Qy 181 TATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACA 240 Db 289 TGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAG 348 Qy

241 TGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGAAAACATAAGGATGAG 300

Qу	349	TGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	408
Db	301	TGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTCTGTC	360
Qy	409	ACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGG	468
Db	361		420
QУ	469	GATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTG	528
Db	421		480
Qу	529	TTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGACT	588
Db	481	TTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGACT	540
QУ	589	ATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGG	648
Db	541	ATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGG	600
QУ	649	TTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT	708
Db	601	TTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTC	660
Qу	709	AGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAG	768
Db	661	AGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAG	720
QУ	769	GTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTC	828
Db	721	GTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTC	780
QУ	829	CTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTC	888
Db	781	CTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTC	840
Qу	889	CAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCT	948
Db	841	CAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCT	900
Qy	949	ACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCC	1008
Db	901	ACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCC	960
Qy	1009	AGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTT	1068
Db	961	AGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTT	1020
Qу	1069	CCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAA	1128
Db	1021	CCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAA	1080
Qy	1129	AGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCG	1188
Db	1081	AGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCG	1140
QУ	1189	$\tt CTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTC$	1248

Db	1141	
Qу	1249	AGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACT 1308
Db	1201	AGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACT 1260
Qy	1309	GTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAAT 1368
Db	1261	GTGGTTTTTCTGGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAAT 1320
QУ	1369	AGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAA 1428
Db	1321	AGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAA 1380
Qу	1429	TGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGC 1488
Db	1381	TGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGC 1440
Qу	1489	AGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAA 1548
Db	1441	AGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAA 1500
Qy	1549	CGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA
Db	1501	CGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA
Qу	1609	AAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT
Db	1561	AAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT
Qу	1669	ATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAAT 1728
Db	1621	ATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCCTTTGTGGCACTGAAT 1680
Qу	1729	GGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGG 1788
Db	1681	GGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGG 1740
Qу	1789	TATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACA 1848
Db	1741	TATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACA 1800
Qу	1849	GACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAA 1908
Db	1801	GACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAA 1860
Qу	1909	AGTTACCTCAAAGGCCACGACCAGCTGG 1936
Db	1861	AGTTACCTCAAAGGCCACGACCAGCTCG 1888

RESULT 15 ADA23359

ID ADA23359 standard; cDNA; 1890 BP.

XX

AC ADA23359;

```
XX
DT
     20-NOV-2003 (first entry)
XX
     cDNA encoding human SECX polypeptide, SEC3 #2.
DE
XX
     Human; secreted polypeptide; membrane-associated polypeptide; SECX; SEC1;
KW
     SEC2; SEC3; SEC4; SEC5; SEC6; SEC7; SEC8; SEC9; SEC10; SEC11; SEC12;
KW
     SEC13; SEC14; SEC15; SECX-associated disorder; lung cancer;
KW
     cardiovascular disease; oncology disease; immune disorder;
KW
     autoimmune disease; transplant rejection; allergy; AIDS; infections;
KW
KW
     inflammatory disorder; arthritis; haematopoietic disorder; skin disorder;
     atherosclerosis; restenosis; neurological disease; Alzheimer's disease;
KW
     trauma; wounds; spinal cord injury; skeletal disorder; cytostatic;
KW
     antiinflammatory; immunosuppressive; anti-HIV; antiarthritic;
KW
     antiarteriosclerotic; cardiant; neuroprotective; nootropic; vulnerary;
KW
     antiallergic; cardiant; dermatological; gene; ss.
ΚW
XX
OS
     Homo sapiens.
XX
PN
     US2003054514-A1.
XX
PD
     20-MAR-2003.
XX
     19-SEP-2001; 2001US-00957187.
PF
XX
                    99US-0123667P.
PR
     09-MAR-1999;
     04-JAN-2000; 2000US-0174485P.
PR
     08-MAR-2000; 2000US-00520781.
PR
     19-SEP-2000; 2000US-0233798P.
PR
     20-SEP-2000; 2000US-0234082P.
PR
XX
PA
     (SHIM/) SHIMKETS R A.
     (LARO/) LAROCHELLE W J.
PA
XX
PΙ
     Shimkets RA, Larochelle WJ;
XX
DR
     WPI; 2003-540616/51.
DR
     P-PSDB; ADA23360.
XX
PT
     New SECX nucleic acids, useful for treating or diagnosing a disorder
PT
     e.g., lung cancer, cardiovascular and oncology diseases, immune disorder,
PT
     and autoimmune disease.
XX
PS
     Claim 3; Page 7; 118pp; English.
XX
     The present invention relates to the isolation of human secreted or
CC
CC
     membrane-associated (SECX) polypeptides designated SEC1-SEC15, and the
CC
     polynucleotide sequences encoding them. Also disclosed is a method for
     screening for a modulator of activity or latency of SECX. The SECX
CC
CC
     polypeptide and polynucleotide sequences may be used for treating or
     preventing SECX-associated disorders such as lung cancer, cardiovascular
CC
CC
     and oncology diseases, immune disorders, autoimmune diseases, transplant
     rejection, allergy, AIDS, infections, inflammatory disorders, arthritis,
CC
     haematopoietic disorders, skin disorders, atherosclerosis, restenosis,
CC
     neurological diseases (e.g. Alzheimer's disease), trauma, wounds, spinal
CC
     cord injuries, and skeletal disorders. The present sequence encodes a
CC
CC
     SECX polypeptide of the invention.
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Sequence 1890 BP; 535 A; 426 C; 463 G; 466 T; 0 U; 0 Other;

60.8%; Score 1881.6; DB 8; Length 1890; Query Match 99.8%; Pred. No. 0; Best Local Similarity Mismatches 0; Matches 1884; Conservative 0; Indels 0; 4; Gaps 49 GGGGCTGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAA 108 Qy 1 GGATCCGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAA 60 Db 109 CAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTG 168 Qу 61 CAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTG 120 Db 169 GACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATT 228 Qу 121 GACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATT 180 Db 229 TATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACA 288 Qу 181 TATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACA 240 Db 289 TGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGAAAACATAAGGATGAG 348 Qу 241 TGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAG 300 Db Qγ Db 409 ACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGG 468 Qу 361 ACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGG 420 Db 469 GATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTG 528 Qу 421 GATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTG 480 Db Qу Db 589 ATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGG 648 Qу 541 ATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGG 600 Db Qу 649 TTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTC 708 601 TTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTC 660 Db 709 AGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAG 768 Qу 661 AGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAG 720 Db 769 GTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTC 828 Qу

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Search completed: March 26, 2004, 00:01:20 Job time: 1254.51 secs

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OM nucleic - nucleic search, using sw model

Run on: March 25, 2004, 23:24:56; Search time 226.203 Seconds

(without alignments)

7588.151 Million cell updates/sec

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Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	2	657.4	21.3	1923	4	US-09-653-274-12	Sequence 12, Appl
	3	657.4	21.3	3261	4	US-09-653-274-5	Sequence 5, Appli
	4	657.4	21.3	3694	4	US-09-653-274-3	Sequence 3, Appli
С	5	604	19.5	846	4	US-09-833-381-920	Sequence 920, App
	6	555.4	18.0	3524	4	US-09-077-940A-3	Sequence 3, Appli
	7	546.8	17.7	3692	4	US-09-077-940A-1	Sequence 1, Appli
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ALIGNMENTS

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; Sequence 1002, Application US/09976594
; Patent No. 6673549
; GENERAL INFORMATION:
; APPLICANT: Furness, Michael
; APPLICANT: Buchbinder, Jenny
; TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH
STEROIDS
; FILE REFERENCE: PA-0041 US
  CURRENT APPLICATION NUMBER: US/09/976,594
; CURRENT FILING DATE: 2001-10-12
; PRIOR APPLICATION NUMBER: 60/240,409
; PRIOR FILING DATE: 2000-10-12
; NUMBER OF SEQ ID NOS: 1143
; SOFTWARE: PERL Program
; SEQ ID NO 1002
  LENGTH: 2278
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; Sequence 12, Application US/09653274
; Patent No. 6635742
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  APPLICANT:
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  APPLICANT: Mize, Nancy K
           Tang, Y. Tom
  APPLICANT:
           Liu, Chenghua
  APPLICANT:
           Drmanac, Radoje T
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  TITLE OF INVENTION: Polypeptides and Polynucleotides
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QУ	1060	ACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCC	1119
Db	1015	ACAGCAGTTCCCGAAGACAAAGTGCCAAAGCCAAGGCCTGGCTGTTGTGCAAAACACGGC	1074
Qy	1120	TCCTTAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAG	1179
Db	1075	CTTGCCGAAGCTTATAAAACCTCCATCGATTTCCCCGGATGAAACTCTGTCATTCAT	1134
Qy		ACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGA	
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Qу		ACAATGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAG	
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QУ		ATAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAAC	
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Qy		AGAGCAAGCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGC	
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QУ	_	CGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGT	
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Qγ
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US-09-653-274-5
; Sequence 5, Application US/09653274
; Patent No. 6635742
; GENERAL INFORMATION:
 APPLICANT: Boyle, Bryan J
 APPLICANT: Yeung, George Y
 APPLICANT: Arterburn, Matthew C
  APPLICANT: Mize, Nancy K
  APPLICANT: Tang, Y. Tom
 APPLICANT: Liu, Chenghua
 APPLICANT: Drmanac, Radoje T
 TITLE OF INVENTION: Methods and Maaterials Relating to Semaphorin-Like
; TITLE OF INVENTION: Polypeptides and Polynucleotides
 FILE REFERENCE: HYS-23
  CURRENT APPLICATION NUMBER: US/09/653,274
  CURRENT FILING DATE: 2000-08-31
  PRIOR APPLICATION NUMBER: 09/491,404
  PRIOR FILING DATE: 2000-01-10
  NUMBER OF SEO ID NOS: 13
  SOFTWARE: PatentIn Ver. 2.1
; SEO ID NO 5
   LENGTH: 3261
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-653-274-5
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 Query Match
 Best Local Similarity 64.5%; Pred. No. 2.6e-171;
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Qу
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Db
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Qу	400	GTCTGTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAA	459
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Qу	460	CCATTCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAAC	519
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Qу	520	GTTGCACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	579
Db	523	GTTGCCCTCTTTGCTGATGGGAAGCTGTATTCTGCCACAGTGGCTGACTTCTTGGCCAGC	582
QУ	580	GACGCAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGAT	639
Db	583	GATGCCGTTATTTATCGAAGCATGGGTGATGGATCTGCCCTTCGCACAATAAAATATGAT	642
QУ	640	TCAAAATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTAC	699
Db	643	TCCAAATGGATAAAAGAGCCACACTTTCTTCATGCCATAGAATATGGAAACTATGTCTAT	702
Qу	700	TTCTTCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGA	759
Db	703	TTCTTCTTTCGAGAAATCGCTGTCGAACATAATAATTTAGGCAAGGCTGTGTATTCCCGC	762
QУ	760	GTGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGG	819
Db	763	GTGGCCCGCATATGTAAAAACGACATGGGTGGTTCCCAGCGGGTCCTGGAGAAACACTGG	822
Qу	820	ACGTCGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTATTTC	879
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Qу	880	AACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCA	939
Db	883	GATGTTCTGCAGTCTATTACAGACATAATACAAATCAATGGCATCCCCACTGTGGTCGGG	942
Qу	940	ACGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTT	999
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Qу	1060	ACACCAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCC	1119
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Qу	1180	${\tt ACGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGA}$	1239

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; Patent ; GENERA ; APPLI ; TITLE ; TITLE ; FILE ; CURRE ; CURRE ; PRIOR ; PRIOR ; NUMBE ; SOFTW ; SEQ ID ; LENG ; TYPE	NO. NO. NO. NO. NO. NO. NO. CANT: CANT: CANT: CANT: CANT: CANT: CANT: OF II NO. REFERI NT AP. FILLI R OF: ARE: NO. 3 IH: 3 IH: 3	Application US/09653274 6635742 DRMATION: Boyle, Bryan J Yeung, George Y Arterburn, Matthew C Mize, Nancy K Tang, Y. Tom Liu, Chenghua Drmanac, Radoje T NVENTION: Methods and Maaterials Relating to Semaphorin-Like NVENTION: Polypeptides and Polynucleotides ENCE: HYS-23 PLICATION NUMBER: US/09/653,274 LING DATE: 2000-08-31 ICATION NUMBER: 09/491,404 NG DATE: 2000-01-10 SEQ ID NOS: 13 PatentIn Ver. 2.1	

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NAME/KEY: CDS
   LOCATION: (434)..(3694)
US-09-653-274-3
 Query Match
                   21.3%; Score 657.4; DB 4; Length 3694;
                   64.5%; Pred. No. 2.8e-171;
 Best Local Similarity
 Matches 1017; Conservative 0; Mismatches 551; Indels
                                                9; Gaps
                                                        2;
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US-09-833-381-920/c
; Sequence 920, Application US/09833381
; Patent No. 6672186
; GENERAL INFORMATION:
  APPLICANT: Robison, Keith E.
  TITLE OF INVENTION: No. 6672186el Nucleic Acid and Protein Homologs
  FILE REFERENCE: 5800-119
  CURRENT APPLICATION NUMBER: US/09/833,381
  CURRENT FILING DATE: 2001-04-11
  PRIOR APPLICATION NUMBER: 09/516,448
  PRIOR FILING DATE: 2000-02-29
  NUMBER OF SEQ ID NOS: 2050
  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 920
   LENGTH: 846
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-833-381-920
                   19.5%; Score 604; DB 4; Length 846;
 Query Match
                   100.0%; Pred. No. 6.9e-157;
 Best Local Similarity
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RESULT 6
US-09-077-940A-3
; Sequence 3, Application US/09077940A
; Patent No. 6576441
: GENERAL INFORMATION:
  APPLICANT: KIMURA, Toru et al.
  TITLE OF INVENTION: NOVEL SEMAPHORIN Z AND GENE ENCODING THE SAME
  FILE REFERENCE: 0020-4426P
  CURRENT APPLICATION NUMBER: US/09/077,940A
  CURRENT FILING DATE: 1998-06-05
  NUMBER OF SEQ ID NOS: 20
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; SEQ ID NO 3
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   NAME/KEY: 5'UTR
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   NAME/KEY: 3'UTR
   LOCATION: (2706)..(3524)
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   NAME/KEY: CDS
   LOCATION: (39)..(2702)
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US-09-077-940A-3
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  Best Local Similarity 60.0%; Pred. No. 4.3e-143;
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Db	1743	GGGGCCAGCACCTCAGGCTTAGGGGACTG 1771	

RESULT 7

US-09-077-940A-1

[;] Sequence 1, Application US/09077940A

[;] Patent No. 6576441

[;] GENERAL INFORMATION:

[;] APPLICANT: KIMURA, Toru et al.

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TITLE OF INVENTION: NOVEL SEMAPHORIN Z AND GENE ENCODING THE SAME
  FILE REFERENCE: 0020-4426P
  CURRENT APPLICATION NUMBER: US/09/077,940A
  CURRENT FILING DATE: 1998-06-05
  NUMBER OF SEQ ID NOS: 20
  SOFTWARE: PatentIn version 3.1
SEO ID NO 1
   LENGTH: 3692
   TYPE: DNA
   ORGANISM: Rattus norvegicus
   FEATURE:
   NAME/KEY: 5'UTR
   LOCATION: (1)..(18)
   OTHER INFORMATION:
   NAME/KEY: CDS
   LOCATION: (19)..(2682)
   OTHER INFORMATION:
   NAME/KEY: 3'UTR
   LOCATION: (2683)..(3653)
   OTHER INFORMATION:
   NAME/KEY: polyA site
   LOCATION: (3654)..(3692)
   OTHER INFORMATION:
US-09-077-940A-1
                   17.7%; Score 546.8; DB 4; Length 3692;
 Query Match
 Best Local Similarity 60.3%; Pred. No. 1.1e-140;
 Matches 1006; Conservative 0; Mismatches 632; Indels
                                                 30; Gaps
                                                           5;
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                        99 TTTCCCAGATGAACCACCTCCACTCAGTGTGGCTCCCAGGGACTACCTGAGCCACTACCC 158
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       117 GGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGC-----ACAGGCTGGA 170
Qу
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              279 CCAAGTAGAACTGGAGCCATCCACATCCACGGAGCTGCGGTATCAGCGGAAGCTTACCTG 338
Db
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Qу
             | | | |
                      Db
       Qy
           399 TCGGAACTTTGTCAAGGTGCTCCTGCTTCGTGACGAATCCACGCTCTTCGTGTGCGGCTC 458
Db
       411 TAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGA 470
Qу
                             459 CAATGCATTCAATCCCATCTGTGCCAATTACAGTATGGACACACTGCAGCTTCTTGGAGA 518
Db
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QУ	471	TGAATTCAGCGGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTT	530
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Qу	531	TGCAGATGGAAAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCAT	590
Db	579	CTCAGATGGGATGCTCTTCACAGCCACAGTAACTGACTTCCTAGCCATCGACGCTGTTAT	638
Qу	591	TTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTT	650
Db	639	CTACCGTAGCCTTGGGGACCGGCCCACACTGCGCACAGTAAAGCATGACTCCAAGTGGTT	698
QУ	651	GAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAG	710
Db	699	TAAAGAGCCATACTTTGTGCATGCGGTGGAGTGGGGAAGCCACGTCTACTTCTTCCG	758
QУ	711	GGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGT	770
Db	759	GGAGATCGCCATGGAGTTTAACTATCTGGAAAAGGTGGTGGTCCCGTGTGGCCCGTGT	818
ДÄ	771	TTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCT	830
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Qу	831	GAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCA	890
Db	879	GAAGGCCCGGCTCAACTGCTCCGTGCCTGGGGACTCACACTTCTACTTCAATGTACTGCA	938
Qу	891	GGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTAC	950
Db	939	GGCTGTGACTGGTGAGCCTTGGCGGCCGTCCAGTGATTCTTGCTGTCTTCTCAAC	998
Qу	951	ACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAG	1010
Db	999	TCCTAGCAACAGCATCCCTGGCTCAGCTGTCTGTGCCTTTGACATGAACCAAGTGGCTGC	1058
Qу	1011	TGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCC	1070
Db	1059	TGTGTTTGAAGGCCGCTTCCGGGAGCAGAAGTCACCTGAGTCAATCTGGACCCCAGTGCC	1118
QУ	1071	TGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAG	1130
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QУ	1131	ATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCT	1190
Db .	1173	GTACAACGCATCCAATGCCCTTCCTGACGAGATTCTCAACTTTGTAAAGACCCACCC	1232
QУ	1191	CATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAG	1250
Db	1233	GATGGACGAAGCGGTGCCCTCCCTGGGCCACTCGCCTTGGATTGTGAGAACTCTGATACG	1292
Qу	1251	ATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGT	1310
Db	1293	GCACCAGCTGACCCGAGTGGCTGTGGATGTGGGTGCAGGCCCATGGGGCAATCAGACAAT	1352
Qу	1311	GGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGG	1364

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QУ
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Qу
                        11
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       1656 TTTTGAGCAGGACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTG 1703
Qу
            1710 GTTTGAGCAAGATGTGTCCGGGGCCAGCACCTCTGGCTTAGGTGACTG 1757
Db
RESULT 8
US-09-254-594-5
; Sequence 5, Application US/09254594
; Patent No. 6566094
; GENERAL INFORMATION:
 APPLICANT: KIMURA, Toru
 APPLICANT: KIKUCHI, Kaoru
 TITLE OF INVENTION: NOVEL SEMAPHORIN GENE: SEMAPHORIN Y
 FILE REFERENCE:
                 0020-4527P
  CURRENT APPLICATION NUMBER: US/09/254,594
  CURRENT FILING DATE: 1999-05-11
  NUMBER OF SEQ ID NOS: 13
  SOFTWARE:
            PatentIn version 3.0
; SEQ ID NO 5
   LENGTH: 2790
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: ()..()
   OTHER INFORMATION: Tissue Type: Child Brain
   NAME/KEY: CDS
   LOCATION: (1)..(2790)
   OTHER INFORMATION: Identification Method: E
   NAME/KEY: misc feature
   LOCATION: ()..()
   OTHER INFORMATION: Identification Method: P for resulting peptide
US-09-254-594-5
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14.3%; Score 443.6; DB 4; Length 2790; Query Match Best Local Similarity 58.6%; Pred. No. 3.1e-112; Matches 849; Conservative 0; Mismatches 584; Indels 164 GGCTGGACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACC 223 Qy 1 11111 1111 1 179 GGCTGGACTTTCAGAGATTCCTGACCTTGAACCGGACCTTGCTAGTGGCTGCCCGGGATC 238 Db 224 ATATTTATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAAC 283 Qу Db 284 TGACATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGG 343 Qу - 1 299 ATCTA---ACATGGAGAAGCCAAGATGTGGAGAACTGTGCTGTACGGGGAAAGCTGACGG 355 Db Qу - 1-1 356 ATGAGTGCTACAACTATATTCGTGTTCTTGTTCCCTGGGACTCCCAGACGCTCCTTGCCT 415 Db 404 GTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCAT 463 Οv 416 GTGGAACGAACTCATTCAGCCCTGTGTGCCGCAGCTATGGGATAACTTCGCTGCAGCAGG 475 Db 464 TCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTG 523 Qу 476 AGGGTGAGGAACTGAGTGGGCAGGCTCGATGCCCCTTTGATGCCACCCAGTCCAACGTGG 535 Db Qу 536 CCATCTTTGCAGAGGGCAGCCTGTACTCAGCCACAGCTGCGGATTTCCAGGCCAGTGATG 595 Db 584 CAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAA 643 Qy 596 CTGTAGTTTACAGAAGCCTTGGGCCCCAGCCCCACTCCGCTCCGCCAAGTATGACTCCA 655 Db 644 AATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCT 703 Qy 656 AGTGGCTCCGAGAGCCACACTTTGTCCAGGCCTTGGAGCATGGAGACCATGTCTACTTCT 715 Db 704 TCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGG 763 Qу 716 TCTTCCGCGAGGTCTCTGTGGAGGATGCTCGGCTGGGGAAGGTGCAGTTCTCCCGCGTAG 775 Db 764 CTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGT 823 Qу 776 CCCGAGTATGTAAACGTGACATGGGCGGCTCGCCTCGGGCCTTGGACCGCCACTGGACAT 835 Db 824 CGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACA 883 Qy 836 CCTTCCTGAAGCTTCGGCTCAACTGCTCTGTCCCTGGGGACTCTACTTTCTATTTTGATG 895 Db 884 TTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGT 943 Qy 11 1 11111 1 11 1 - 1 896 TTTTACAGGCCTTGACTGGGCCTGTGAACCTGCATGGCCGCTCTGCTCTTTTGGGGTCT 955 Db Qy 944 TTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACA 1003

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1 1 1 1 1
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      1598 GTGGATGG-1605
Qу
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RESULT 9

US-09-254-594-4

- ; Sequence 4, Application US/09254594
- ; Patent No. 6566094
- ; GENERAL INFORMATION:
- ; APPLICANT: KIMURA, Toru
- ; APPLICANT: KIKUCHI, Kaoru
- ; TITLE OF INVENTION: NOVEL SEMAPHORIN GENE: SEMAPHORIN Y
- ; FILE REFERENCE: 0020-4527P

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CURRENT APPLICATION NUMBER: US/09/254,594
 CURRENT FILING DATE: 1999-05-11
 NUMBER OF SEQ ID NOS: ' 13
 SOFTWARE:
          PatentIn version 3.0
; SEO ID NO 4
  LENGTH: 3432
  TYPE: DNA
  ORGANISM: Homo sapiens
  FEATURE:
  NAME/KEY: misc feature
  LOCATION: ()..()
  OTHER INFORMATION: Tissue Type: Child Brain
  NAME/KEY: 5'UTR
  LOCATION: (1)..(187)
  OTHER INFORMATION: Identification Method: E
  NAME/KEY: misc feature
  LOCATION: (188)..(2977)
  OTHER INFORMATION: CDS; Identification Method: E
  NAME/KEY: 3'UTR
  LOCATION: (2978)..(3407)
  OTHER INFORMATION: Identification Method: E
  NAME/KEY: polyA signal
  LOCATION: (3408)..(3432)
  OTHER INFORMATION: Identification Method: E
US-09-254-594-4
                   14.3%; Score 443.6; DB 4; Length 3432;
 Query Match
 Best Local Similarity 58.6%; Pred. No. 3.5e-112;
 Matches 849; Conservative 0; Mismatches 584; Indels 15; Gaps
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          366 GGCTGGACTTTCAGAGATTCCTGACCTTGAACCGGACCTTGCTAGTGGCTGCCCGGGATC 425
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       224 ATATTTATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAAC 283
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               1 11 111
                           486 ATCTA---ACATGGAGAAGCCAAGATGTGGAGAACTGTGCTGTACGGGGAAAGCTGACGG 542
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Db
       Qу
          723 CCATCTTTGCAGAGGGCAGCCTGTACTCAGCCACAGCTGCGGATTTCCAGGCCAGTGATG 782
Db
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QУ	584	CAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAA	643
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QУ	644	AATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCT	703
Db	843	AGTGGCTCCGAGAGCCACACTTTGTCCAGGCCTTGGAGCATGGAGACCATGTCTACTTCT	902
Qу	704	TCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGG	763
Db	903	TCTTCCGCGAGGTCTCTGTGGAGGATGCTCGGCTGGGGAAGGTGCAGTTCTCCCGCGTAG	962
Qу	764	CTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGT	823
Db	963	CCCGAGTATGTAAACGTGACATGGGCGGCTCGCCTCGGGCCTTGGACCGCCACTGGACAT	1022
QУ	824	CGTTCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACA	883
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QУ	884	TTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGT	943
Db	1083	TTTTACAGGCCTTGACTGGGCCTGTGAACCTGCATGGCCGCTCTGCTCTTTTGGGGTCT	1142
QУ	944	TTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACA	1003
Db	1143	TCACCACCCAGACCAATAGCATCCCTGGCTCTGCCGTCTGCGCCTTCTACCTGGATGAGA	1202
Qy	1004	TTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACAC	1063
Db	1203	TTGAGCGTGGGTTTGAGGGCAAGTTCAAGGAGCAGAGGAGTCTGGATGGGGCCTGGACTC	1262
QУ	1064	CAGTTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCT	1123
Db ·	1263	CTGTGTCTGAGGACAGAGTTCCCTCACCCAGGCCAGGATCCTGTGCAGGAGTAGGGGGAG	1322
QУ	1124	TAGAAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGC	1183
Db	1323	CTGCCTTGTTCTCCTCTTCCCGAGACCTCCCTGATGATGTCCTGACCTTCATCAAGGCTC	1382
QУ	1184	ACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAA	1243
Db	1383	ACCCGCTGCTGGACCCCGCTGTACCACCTGTCACCCATCAGCCTCTACTCACTCTCA	1439
QУ	1244	TGGTCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATC	1303
Db	1440	CTAGCAGGGCCCTACTGACCCAAGTAGCTGTGGATGGCATGGCTGGTCCCCACAGTAACA	1499
QУ	1304	ACACTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAG	1363
Db	1500		1559
Qу	1364	GAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTG	1423
Dh	1560	GCCCATCCGCGGGACCTGAGCCCATCCTCCTGGAAGAGATTGATGCCTACAGCCCTG	1616

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1424 AAAAATGCAGCTATGATGGAGTCG-----AAGACAAAAGGATCATGGGCATGCAGCTGG 1477
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          Db
      1538 GCCGGTGTGAACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATT 1597
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          1737 GCCGGTGTGCCCGGCATGGGGCCTGTCAGAGGAGCTGTTTGGCTTCTCAGGACCCATACT 1796
Db
      1598 GTGGATGG 1605
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Db
RESULT 10
US-09-254-594-2
; Sequence 2, Application US/09254594
; Patent No. 6566094
; GENERAL INFORMATION:
; APPLICANT: KIMURA, Toru
 APPLICANT: KIKUCHI, Kaoru
  TITLE OF INVENTION: NOVEL SEMAPHORIN GENE: SEMAPHORIN Y
               0020-4527P
 FILE REFERENCE:
 CURRENT APPLICATION NUMBER: US/09/254,594
 CURRENT FILING DATE: 1999-05-11
; NUMBER OF SEQ ID NOS:
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
  LENGTH: 2787
   TYPE: DNA
   ORGANISM: Rattus norvegicus
   FEATURE:
  NAME/KEY: misc feature
   LOCATION: ()..()
   OTHER INFORMATION: Tissue Type: Brain
   NAME/KEY: CDS
   LOCATION: (1)..(2787)
   OTHER INFORMATION: Identification Method: E
   NAME/KEY: misc feature
   LOCATION: ()..()
   OTHER INFORMATION: Identification Method: P for resulting peptide
US-09-254-594-2
                   12.0%; Score 369.8; DB 4; Length 2787;
 Query Match
 Best Local Similarity 55.9%; Pred. No. 7.8e-92;
 Matches 811; Conservative
                       0; Mismatches 622; Indels
                                                18; Gaps
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Qy
          Db
       224 ATATTTATACTGTTGATATAGACACATCACACACGGAAGAAATTTATTGTAGCAAAAAAC 283
Qу
          Db
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Db	296	TTCTGACATGGCGGAGCCAAGACATGGAGAATTGTGCTGTCCGGGGAAAGCTGACGG	352
Qу	344	ATGAGTGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	403
Db	353	ACGAATGCTACAACTACATCCGTGTTCTTGTTCCCTGGGACTCGCAGACACTCCTTGCCT	412
Qу	404	GTGGAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCAT	463
Db	413	GTGGAACAAATTCCTTCAGCCCTGTGTGTCGCAGCTATGGGATAACATCTCTGCAACAGG	472
QУ	464	TCGGGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTG	523
Db	473	AGGGTGAGGAGCTGAGTGGCCAAGCTCGATGCCCCTTTGATGCCACCCAGTCCACTGTGG	532
Qу	524	CACTGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	583
Db	533	CCATCTCTGCAGAGGGTAGTTTGTACTCAGCCACAGCAGCAGATTTCCAGGCCAGTGATG	592
Qу	584	CAGTCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAA	643
Db	593	CTGTGGTTTACAGAAGCCTTGGACCTCAGCCCCCACTCCGTTCTGCAAAGTATGACTCCA	652
Qу	644	AATGGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCT	703
Db	653		712
Qу	704	TCTTCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAG	760
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Qу	761	TGGCTCAGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGA	820
Db	773	TGGCCCGGGTGTGTAAACGTGACATGGGTGGCTCACCACGGGCCTTGGATCGCCACTGGA	832
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Db	833		892
Qу	881	ACATTCTCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAA	940
Db	893		952
Qy	941	CGTTTTCTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTG	1000
Db	953		1012
Qy	1001	ACATTGCCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCT	1060
Db	1013		
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Db	1073		1132

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       1181 CGCACCCGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAA 1240
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          1193 CACACCCACTGCTGGATCCCGCTGTGCCACC---TGCCACCCATCAACCTCTCCTCACTC 1249
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US-09-254-594-1
; Sequence 1, Application US/09254594
; Patent No. 6566094
; GENERAL INFORMATION:
  APPLICANT: KIMURA, Toru
  APPLICANT: KIKUCHI, Kaoru
  TITLE OF INVENTION: NOVEL SEMAPHORIN GENE: SEMAPHORIN Y
  FILE REFERENCE:
                0020-4527P
  CURRENT APPLICATION NUMBER: US/09/254,594
  CURRENT FILING DATE: 1999-05-11
  NUMBER OF SEQ ID NOS: 13
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
   LENGTH: 3195
   TYPE: DNA
   ORGANISM: Rattus norvegicus
   FEATURE:
   NAME/KEY: misc feature
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LOCATION: ()..()

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  NAME/KEY: 5'UTR
  LOCATION: (1)..(50)
  OTHER INFORMATION: Identification Method: E
  NAME/KEY: misc feature
  LOCATION: (51)..(2837)
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  NAME/KEY: 3'UTR
  LOCATION: (2838)..(3195)
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US-09-254-594-1
                 12.0%; Score 369.8; DB 4; Length 3195;
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 Best Local Similarity 55.9%; Pred. No. 8.5e-92;
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Qy
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Db
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                                        403 ACGAATGCTACAACTACATCCGTGTTCTTGTTCCCTGGGACTCGCAGACACTCCTTGCCT 462
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Qу
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Qy	1361	TAGGAAATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACT	1420
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Qу	1421	CTGAAAAATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGC	1474
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RESULT 12
US-09-833-381-112
; Sequence 112, Application US/09833381
: Patent No. 6672186
; GENERAL INFORMATION:
  APPLICANT: Robison, Keith E.
  TITLE OF INVENTION: No. 6672186el Nucleic Acid and Protein Homologs
  FILE REFERENCE: 5800-119
  CURRENT APPLICATION NUMBER: US/09/833,381
  CURRENT FILING DATE: 2001-04-11
  PRIOR APPLICATION NUMBER: 09/516,448
  PRIOR FILING DATE: 2000-02-29
  NUMBER OF SEQ ID NOS: 2050
  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 112
   LENGTH: 591
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: (1)...(591)
   OTHER INFORMATION: n = A, T, C or G
US-09-833-381-112
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                         0; Mismatches 42; Indels
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US-09-976-594-632
; Sequence 632, Application US/09976594
; Patent No. 6673549
; GENERAL INFORMATION:
; APPLICANT: Furness, Michael
 APPLICANT: Buchbinder, Jenny
  TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH
STEROIDS
  FILE REFERENCE: PA-0041 US
  CURRENT APPLICATION NUMBER: US/09/976,594
  CURRENT FILING DATE: 2001-10-12
  PRIOR APPLICATION NUMBER: 60/240,409
  PRIOR FILING DATE: 2000-10-12
; NUMBER OF SEQ ID NOS: 1143
  SOFTWARE: PERL Program
; SEQ ID NO 632
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   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: misc feature
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US-09-976-594-632
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RESULT 14
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; Sequence 3, Application US/09833381
; Patent No. 6672186
; GENERAL INFORMATION:
  APPLICANT: Robison, Keith E.
  TITLE OF INVENTION: No. 6672186el Nucleic Acid and Protein Homologs
  FILE REFERENCE: 5800-119
  CURRENT APPLICATION NUMBER: US/09/833,381
  CURRENT FILING DATE: 2001-04-11
  PRIOR APPLICATION NUMBER: 09/516,448
  PRIOR FILING DATE: 2000-02-29
  NUMBER OF SEQ ID NOS: 2050
  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
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   NAME/KEY: misc feature
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US-08-121-713D-57
; Sequence 57, Application US/08121713D
; Patent No. 5639856
   GENERAL INFORMATION:
    APPLICANT: Goodman, Corey S.
    APPLICANT: Kolodkin, Alex L.
    APPLICANT: Matthes, David
    APPLICANT: Bentley, David R.
    APPLICANT: O'Connor, Timothy
    TITLE OF INVENTION: The Semaphorin Gene Family NUMBER OF SEQUENCES: 100
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
      STREET: 268 Bush Street, Suite 3200
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
      ZIP: 94104
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/121,713D
      FILING DATE: 13-SEP-1993
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
      NAME: Osman, Richard A.
      REGISTRATION NUMBER: 36,627
      REFERENCE/DOCKET NUMBER: B94-002-1
     TELECOMMUNICATION INFORMATION:
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    TELEX:
  INFORMATION FOR SEO ID NO: 57:
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    TOPOLOGY: linear
   MOLECULE TYPE: cDNA
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TELEPHONE: (415)343-4341

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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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13	3025.8	97.8	3165	12	US-10-403-676-47	Sequence 47, Appl
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17	2860.8	92.5	2995.	12	US-10-403-676-19	Sequence 19, Appl
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24	2698	87.2	3333	10	US-09-957-187-5	Sequence 5, Appli
25	1881.6	60.8	1890	10	US-09-991-053-29	Sequence 29, Appl
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27	1881.6	60.8	1890	10	US-09-957-187-82	Sequence 82, Appl
28	1879.2	60.8	2583	12	US-10-403-676-51	Sequence 51, Appl
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38	1788.6	57.8	1921	12	US-10-403-676-15	Sequence 15, Appl
39	1788.6	57.8	1921	15	US-10-449-548-15	Sequence 15, Appl
40	1719.4	55.6	1908	12	US-10-403-676-35	Sequence 35, Appl
41	1719.4	55.6	1908	15	US-10-449-548-35	Sequence 35, Appl
42	1476.2	47.7	1492	12	US-10-403-676-23	Sequence 23, Appl
43	1476.2	47.7	1492	15	US-10-449-548-23	Sequence 23, Appl
44 45	1422.2	46.0	1438	12	US-10-403-676-25	Sequence 25, Appl
43	1422.2	46.0	1438	15	US-10-449-548-25	Sequence 25, Appl

ALIGNMENTS

RESULT 1 US-09-991-053-3

- ; Sequence 3, Application US/09991053
 ; Publication No. US20030003532A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Shimkets, Richard A.

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TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES ENCODING HUMAN SLIT-,
 TITLE OF INVENTION: MEGF-, AND ROUNDABOUT-LIKE POLYPEPTIDES
 FILE REFERENCE: 15966-540 CON S-10
  CURRENT APPLICATION NUMBER: US/09/991,053
  CURRENT FILING DATE: 2002-05-23
  PRIOR APPLICATION NUMBER: USSN 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 09/520,781
  PRIOR FILING DATE: 2000-03-08
  NUMBER OF SEQ ID NOS: 81
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  NAME/KEY: CDS
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  NAME/KEY: misc feature
  LOCATION: (3047)
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Db	754	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	813
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; Publication No. US20030054514A1
; GENERAL INFORMATION:
  APPLICANT: Shimkets, Richard A.
  APPLICANT: LaRochelle, William
  TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES AND PROTEINS ENCODED THEREBY
  FILE REFERENCE: 15966-540 CIP
  CURRENT APPLICATION NUMBER: US/09/957,187
  CURRENT FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 09/520,781
   PRIOR FILING DATE: 2000-03-03
   PRIOR APPLICATION NUMBER: 60/234,082
   PRIOR FILING DATE: 2000-09-20
   PRIOR APPLICATION NUMBER: 60/233,798
   PRIOR FILING DATE: 2000-09-19
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Qy	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
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Qу	2161	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2220
Db	2374	GCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAG	2433
Qу	2221	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2280
Db	2434	ATGCTCATTAAAGCAGACCAGCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA	2493
Qу	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCGAGTGGGAGAGGAAC	2340
Db	2494	ACCCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGCACCCGCGAGTGGGAGAGGAAC	2553
Qу	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2400
Db	2554	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC	2613
Qy	2401	ACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC	2460
Db	2614	ACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTCCTGCCCATC	2673
Qу	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2520
Db	2674	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG	2733
Qу	2521	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2580
Db	2734	ATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGC	2793
Qу	2581	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2640
Db	2794	AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	2853
Qу	2641	GTTCCACAGCGGGAGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2700
Db	2854	GTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTA	2913

QУ	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2760
Db	2914	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC	2973
Qу	2761	CCCACGAACTCGCTCACGAGAAGCCACCAGGCCACC-ACTCTCAAAAGAAACAACACTAA	2819
Db	2974	CCCACGAACTCGCTCACGAGAAGCCACCTGACCACCTACTCTCATCAGAAGCAACACTAA	3033
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Db	3034	CCCCGACAATTCANCTCTGACTTCAAAGGGACCAGAGCTTTGGCAGGGGAGACAACCCGC	3093
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Db	3094	CGCCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGG	3153
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Db	3154	CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC	3213
Qу	2999	TGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTT	3058
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RESULT 3

US-10-403-676-31

- ; Sequence 31, Application US/10403676
- ; Publication No. US20040029150A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Alsobrook II, John
- ; APPLICANT: Anderson, David W.
- ; APPLICANT: Boldog, Ferenc L.
- ; APPLICANT: Burgess, Catherine E.
- ; APPLICANT: Casman, Stacie J.
- ; APPLICANT: Edinger, Shlomit R.
- ; APPLICANT: Gerlach, Valerie L.
- ; APPLICANT: Grosse, William M.
- ; APPLICANT: Guo, Xiaojia
- ; APPLICANT: Gusev, Vladimir Y.
- ; APPLICANT: Ji, Weizhen
- ; APPLICANT: LaRochelle, William J.
- ; APPLICANT: Lepley, Denise M.
- ; APPLICANT: Li, Li
- ; APPLICANT: Liu, Xiaohong
- ; APPLICANT: MacDougall, John R.
- ; APPLICANT: Malyankar, Uriel M.
- ; APPLICANT: Millet, Isabelle
- ; APPLICANT: Padigaru, Muralidhara
- ; APPLICANT: Patturajan, Meera
- ; APPLICANT: Peyman, John A.
- ; APPLICANT: Rastelli, Luca
- ; APPLICANT: Reiger, Daniel

```
APPLICANT: Rothenberg, Mark E.
  APPLICANT: Shimkets, Richard A.
  APPLICANT: Stone, David J.
 APPLICANT: Taupier, Raymond J.
 APPLICANT: Vernet, Corine
; APPLICANT: Zerhusen, Bryan D.
  TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME,
AND METHODS OF USE
; FILE REFERENCE: 21402-573B
  CURRENT APPLICATION NUMBER: US/10/403,676
  CURRENT FILING DATE: 2003-03-31
  PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 09/520,781
  PRIOR FILING DATE: 2000-03-08
  PRIOR APPLICATION NUMBER: 09/957,187
  PRIOR FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/127,352
  PRIOR FILING DATE: 1999-04-01
  PRIOR APPLICATION NUMBER: 09/538,092
  PRIOR FILING DATE: 2000-03-29
  PRIOR APPLICATION NUMBER: 09/604,286
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/140,584
  PRIOR FILING DATE: 1999-06-23
  PRIOR APPLICATION NUMBER: 60/370,381
  PRIOR FILING DATE: 2002-04-05
  PRIOR APPLICATION NUMBER: 60/384,297
  PRIOR FILING DATE: 2002-05-30
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 179
  SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 31
   LENGTH: 3498
;
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (214)..(3030)
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: (3047)..(3047)
   OTHER INFORMATION: Wherein n may be a, c, g or t
US-10-403-676-31
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 Best Local Similarity 99.3%; Pred. No. 0;
 Matches 3072; Conservative 0; Mismatches
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Qу
             214 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 273
Db
          61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qγ
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Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
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Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	454	ATAGACACACACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	513
Qу	301	CAGGCCGATGTAGACACTGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	514	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	573
Qу	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	574	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	633
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	634	${\tt AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC}$	693
Qу	481	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTTTTGCAGATGGA	540
Db	694	GGAATGCCAGATGCCCAAACATGCCAACGTTGCACTTTTTGCAGATGGA	753
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
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Db	814	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	873
QУ		TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	
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Db		GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	
Qу		GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	
Db		GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	
Qу		TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
Db		TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
ДĀ		GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	
Db	1114	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	11/3

Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1174	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1233
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234		1293
Qу	1081	GIICCIMACCCMGGCIAGGCIAGGIIGGIIGGIIGGIIGGIIGGIIGGIIGG	1140
Db	1294		1353
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1413
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1414		1473
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1533
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1534	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1593
QУ	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1594	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1653
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1654	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1713
QУ	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1714	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1773
Qу	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1774	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1833
Qy	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1834	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1893
Qy	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1894	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1953
ДÄ	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	1800
Db	1954	TCCCTCTTGCCCAGCACCACCATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	2013

QУ	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
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QУ	1861	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	1920
Db	2074	GCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAA	2133
QУ	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	2134	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2193
Qу	1981	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2040
Db	2194	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2253
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Db	2254	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCCGGGGCTCCATGAGC	2313
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2160
Db	2314	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG	2373
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Qу	2281	ACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCGAGTGGGAGAGCAAC	2340
Db	2494	ACCCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGGCACCCGCGAGTGGGAGAGGAAC	2553
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Db		AGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAA	
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Db	2974	CCCACGAACTCGCTCACGAGAAGCCACCTGACCACCTACTCTCATCAGAAGCAACACTAA	3033
Qу	2820	CTCCTCCAATTCCTCTC-ACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGC	2878
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; Public	9-548 ice 31 ation	-31 , Application US/10449548 No. US20040018977A1	

- ; GENERAL INFORMATION:
- ; APPLICANT: Alvarez, Enrique
- ; APPLICANT: Anderson, David W.
- ; APPLICANT: Dhanabal, Mohanraj
- ; APPLICANT: Khramtsov, Nikolai V. ; APPLICANT: LaRochelle, William J.
- ; APPLICANT: Li, Li
- ; APPLICANT: Lichenstein, Henri
- APPLICANT: Ooi, Chean Eng
- APPLICANT: Padigaru, Muralidhara
- APPLICANT: Shimkets, Richard A.
- APPLICANT: Zhong, Mei
- TITLE OF INVENTION: SEMAPHORIN-LIKE PROTEINS AND METHODS OF USING SAME
- FILE REFERENCE: 15966-540CIP2
- CURRENT APPLICATION NUMBER: US/10/449,548
- CURRENT FILING DATE: 2003-05-30
- PRIOR APPLICATION NUMBER: 09/520,781
- PRIOR FILING DATE: 2000-03-03
- PRIOR APPLICATION NUMBER: 60/123,667
- PRIOR FILING DATE: 1999-03-09
- PRIOR APPLICATION NUMBER: 60/234,082

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PRIOR FILING DATE: 2000-09-20
  PRIOR APPLICATION NUMBER: 60/233,798
  PRIOR FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/174,485
  PRIOR FILING DATE: 2000-01-04
  PRIOR APPLICATION NUMBER: 10/403,676
  PRIOR FILING DATE: 2003-03-31
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/384,798
  PRIOR FILING DATE: 2002-05-30
  PRIOR APPLICATION NUMBER: 60/402,407
  PRIOR FILING DATE: 2002-08-09
  PRIOR APPLICATION NUMBER: 60/443,062
  PRIOR FILING DATE: 2003-01-28
  NUMBER OF SEQ ID NOS: 58
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; SEQ ID NO 31
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   ORGANISM: Homo sapiens
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   NAME/KEY: CDS
   LOCATION: (214)..(3030)
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: (3047)..(3047)
   OTHER INFORMATION: Wherein n may be a, c, g or t
US-10-449-548-31
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            454 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 513
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        301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360
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            514 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 573
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Qу	361	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	420
Db	574	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	633
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	634	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	693
QУ	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	694	GGAATGCCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	753
QУ	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
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Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	814	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	873
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	874		933
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	934	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	993
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	994		1053
QУ	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1054		1113
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1114		1173
Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1174		1233
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1234		1293
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1294		1353
Qy	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1354		1413

Qу		GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	
Db	1414	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1473
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1474	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1533
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1534	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1593
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1594	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1653
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1654	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1713
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1714	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1773
QУ	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1774	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1833
QУ	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1834	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1893
QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1740
Db	1894	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGGGCATTCCAGT	1953
QУ	1741	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	1800
Db	1954	TCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGG	2013
Qy	1801	GGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGG	1860
Db	2014	GGAGGAATGCTGGAAGCATCTGCTTGACTCACCTGACAGACCACAGACCCTTTGGGG	2073
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Qу	1921	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	1980
Db	2134	GGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTC	2193
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Db	2194	ATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGAC	2253
Ov	2041	GTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGC	2100

Db	2254		
Qу	2101	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG 2160	
Db	2314	AGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAG 2373	
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Db	2434	ATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCA 2493	
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Db	2494	ACCCCAACGCTGCAGCAGAAGCGGGAACCCAGCCGCGGCACCCGCGAGTGGGAGAGGAAC 2553	
Qу	2341	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC 2400	
Db	2554	CAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCC 2613	
Qу	2401	ACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATC 2460	
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Qу	2461	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG 2520	
Db	2674	ACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAG 2733	
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Qу	2701	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2760	
Db	2914	AGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTAC 2973	
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            3154 CCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGC 3213
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; Sequence 27, Application US/10403676
; Publication No. US20040029150A1
; GENERAL INFORMATION:
; APPLICANT: Alsobrook II, John
 APPLICANT: Anderson, David W.
 APPLICANT: Boldog, Ferenc L.
 APPLICANT: Burgess, Catherine E.
  APPLICANT: Casman, Stacie J.
 APPLICANT: Edinger, Shlomit R.
; APPLICANT: Gerlach, Valerie L.
 APPLICANT: Grosse, William M.
; APPLICANT: Guo, Xiaojia
  APPLICANT: Gusev, Vladimir Y.
             Ji, Weizhen
  APPLICANT:
  APPLICANT:
             LaRochelle, William J.
  APPLICANT: Lepley, Denise M.
  APPLICANT: Li, Li
  APPLICANT:
             Liu, Xiaohong
; APPLICANT: MacDougall, John R.
 APPLICANT: Malyankar, Uriel M.
; APPLICANT: Millet, Isabelle
 APPLICANT: Padigaru, Muralidhara
 APPLICANT:
             Patturajan, Meera
   APPLICANT:
             Peyman, John A.
              Rastelli, Luca
   APPLICANT:
              Reiger, Daniel
   APPLICANT:
   APPLICANT: Rothenberg, Mark E.
   APPLICANT: Shimkets, Richard A.
; APPLICANT: Stone, David J.
; APPLICANT: Taupier, Raymond J.
; APPLICANT: Vernet, Corine
   APPLICANT: Zerhusen, Bryan D.
   TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME,
AND METHODS OF USE
; FILE REFERENCE: 21402-573B
   CURRENT APPLICATION NUMBER: US/10/403,676
   CURRENT FILING DATE: 2003-03-31
   PRIOR APPLICATION NUMBER: 60/123,667
   PRIOR FILING DATE: 1999-03-09
   PRIOR APPLICATION NUMBER: 09/520,781
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PRIOR FILING DATE: 2000-03-08
  PRIOR APPLICATION NUMBER: 09/957,187
  PRIOR FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/127,352
  PRIOR FILING DATE: 1999-04-01
  PRIOR APPLICATION NUMBER: 09/538,092
  PRIOR FILING DATE: 2000-03-29
  PRIOR APPLICATION NUMBER: 09/604,286
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/140,584
  PRIOR FILING DATE: 1999-06-23
  PRIOR APPLICATION NUMBER: 60/370,381
  PRIOR FILING DATE: 2002-04-05
  PRIOR APPLICATION NUMBER: 60/384,297
  PRIOR FILING DATE: 2002-05-30
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 179
  SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 27
  LENGTH: 3055
  TYPE: DNA
  ORGANISM: Homo sapiens
   FEATURE:
  NAME/KEY: CDS
  LOCATION: (2)..(3055)
US-10-403-676-27
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                         0; Mismatches
 Matches 3040; Conservative
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Db
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          63 AACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGC 122
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       287 CATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATG 346
Qу
           243 CATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATG 302
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           303 AGTGCCACAACTTTATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTTGTCTGTG 362
Db
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QΥ	407	GAACTAATGCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCG	466
Db	363	GAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCG	422
Qу	467	GGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCAC	526
Db	423	GGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCAC	482
Qу	527	TGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	586
Db	483		542
Qу	587	TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT	646
Db	543	TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT	602
Qу	647	GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT	706
Db	603	GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT	662
QУ	707	TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC	766
Db	663	TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC	722
Qу	767	AGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGT	826
Db	723	AGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGT	782
Qу	827	TCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTTTT	886
Db	783	TCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTC	842
Qу	887	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	946
Db	843	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	902
Qу	947	CTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTG	1006
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Qy 1	1007	CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	1066
Db	963	CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	1022
Qy 1	1067	TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAG	1126
Db 1	1023	TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTTAG	1082
Qy 1	l127	AAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACC	1186
Db 1	1083	AAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACC	1142
Qy 1	L187	CGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGG	1246
Db 1	1143	CGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGG	1202
Qy 1	L247	TCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACA	1306

Db	1203	TCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACA	1262
QУ	1307	CTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAA	1366
Db	1263	CTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAA	1322
Qу	1367	ATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAA	1426
Db	1323		1382
Qу	1427	AATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAA	1486
Db	1383	AATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAA	1442
Qу	1487	GCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTG	1546
Db	1443	GCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTG	1502
QУ	1547	AACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1606
Db	1503	AACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1562
Qу	1607	TAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT	1666
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QУ	1667	ACATAGAGCGTGGCAATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
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QУ	1727	ATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGG	1786
Db	1683	ATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGG	1742
Qу	1787	GGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCA	1846
Db	1743	GGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCA	1802
QУ	1847	CAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGG	1906
Db	1803	CAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGG	1862
Qу	1907	AAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCA	1966
Db	1863	AAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCA	1922
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Qу	2387	CCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGG	2446
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Qу	2627	GCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGT	2686
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Db	2703	ATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAA	2762
Qу	2807	GAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGG	2866
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; Sequence 27, Application US/10449548
; Publication No. US20040018977A1
; GENERAL INFORMATION:
; APPLICANT: Alvarez, Enrique
; APPLICANT: Anderson, David W.
  APPLICANT: Dhanabal, Mohanraj
; APPLICANT: Khramtsov, Nikolai V.
; APPLICANT: LaRochelle, William J.
; APPLICANT: Li, Li
; APPLICANT: Lichenstein, Henri
; APPLICANT: Ooi, Chean Eng
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Shimkets, Richard A.
  APPLICANT: Zhong, Mei
  TITLE OF INVENTION: SEMAPHORIN-LIKE PROTEINS AND METHODS OF USING SAME
  FILE REFERENCE: 15966-540CIP2
  CURRENT APPLICATION NUMBER: US/10/449,548
  CURRENT FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: 09/520,781
   PRIOR FILING DATE: 2000-03-03
   PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 60/234,082
  PRIOR FILING DATE: 2000-09-20
  PRIOR APPLICATION NUMBER: 60/233,798
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/174,485
; PRIOR FILING DATE: 2000-01-04
  PRIOR APPLICATION NUMBER: 10/403,676
  PRIOR FILING DATE: 2003-03-31
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/384,798
  PRIOR FILING DATE: 2002-05-30
  PRIOR APPLICATION NUMBER: 60/402,407
  PRIOR FILING DATE: 2002-08-09
  PRIOR APPLICATION NUMBER: 60/443,062
  PRIOR FILING DATE: 2003-01-28
  NUMBER OF SEQ ID NOS: 58
  SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 27
   LENGTH: 3055
   TYPE: DNA
   ORGANISM: Homo sapiens
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FEATURE:

; NAME/KEY: CDS

; LOCATION: (2)..(3055)

US-10-449-548-27

Query Match 98.2%; Score 3037.6; DB 15; Length 3055; Best Local Similarity 99.9%; Pred. No. 0; Matches 3040; Conservative 0: Mismatches Indels 0; Gaps 0: 47 CTGGGGCTGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAA 106 Qу Db 3 CCGGATCCGGTTTCCCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAA 62 Qу 63 AACAGTATCCGGTGTTTGTGGGCCACAAGCCAGGACGGAACACCACAGAGGCACAGGC 122 Db 167 TGGACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATA 226 Qу 123 TGGACATCCAGATGATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATA 182 Db 227 TTTATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGA 286 Qу Db 183 TTTATACTGTTGATATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGA 242 287 CATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATG 346 Qу Db 243 CATGGAAATCTAGACAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATG 302 Qу Db 407 GAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCG 466 Qу 363 GAACTAATGCCTTCAACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCG 422 Db 467 GGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCAC 526 Qу 423 GGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCAC 482 Dh Qy Db Qу 587 TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT 646 543 TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT 602 Db 647 GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT 706 Qу 603 GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT 662 Db 707 TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC 766 Qy Db 663 TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC 722 767 AGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGT 826 Qy

Db	723	AGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGT	782
Qу	827	TCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTC	886
Db	783	TCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTATTTCAACATTC	842
QУ	887	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	946
Db	843	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	902
Qу	947	CTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTG	1006
Db		CTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTG	
QУ		CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	
Db		CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	
QУ		TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTTAG	
Db		TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCTTAG	
Qγ		AAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACC	
Db		AAAGATATGCAACCTCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACC	
Qy Db		CGCTCATGGATGAGGCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGG	
Qу		TCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACA	
Db		TCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACA TCAGATACCGCCTTACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACA	
Qу		CTGTGGTTTTTCTGGGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAA	
Db			
Qу		ATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAA	
Db	1323		1382
Qу	1427	AATGCAGCTATGATGGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAA	1486
Db	1383		1442
Qу	1487	GCAGCTCTCTGTATGTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTG	1546
Db	1443		1502
QУ	1547	AACGACATGGGAAGTGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1606
Db	1503	AACGACATGGGAAGTGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1562
Qу	1607	TAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT	

Db	1563	${\tt TAAAGGAAGGTGGTGCCTGCAGCCATTTATCACCCAACAGCAGACTGACT$	1622
Qy	1667	ACATAGAGCGTGGCAATACAGATGGTCTGGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1623		1682
Qy	1727	ATGGGCATTCCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGG	1786
Db	1683		1742
Qу	1787	GGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCA	1846
Db	1743	GGTATGAGTCTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCA	1802
Qу	1847	CAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGG	1906
Db	1803	CAGACCCTTTGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGG	1862
QУ	1907	AAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCA	1966
Db	1863	AAAGTTACCTCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCA	1922
Qу	1967	TCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATC	2026
Db	1923	TCCTGGCTTTCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGATC	1982
QУ	2027	ATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCC	2086
Db	1983	ATCGGCGCAAAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCC	2042
Qу	2087	GGGGCTCCATGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAG	2146
Db	2043	GGGGCTCCATGAGCAGCGCCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAG	2102
Qу	2147	ACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCG	2206
Db	2103	ACCCAAAGCCGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCG	2162
Qу	2207	GCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCC	2266
Db	2163	GCAACACGGCCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCC	2222
Qу	2267	CCACCCAGAGTCAACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGGCAGCCGCG	2326
Db	2223	CCACCCAGAGTCAACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCG	2282
Qу	2327	AGTGGGAGAGGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCATGGGCT	2386
Db	2283	AGTGGGAGAGCACAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCT	2342
Qу	2387	CCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGG	2446
Db	2343	CCCCTGTGATTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGG	2402
Qу	2447	TGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGA	2506
Db	2403	TGGTCCTGCCCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGA	2462

Qу	2507	GCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCA	2566
Db	2463	GCGAGGTGGCCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCA	2522
QУ	2567	AGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACA	2626
Db	2523	AGGAACATCTCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACA	2582
Qу	2627	GCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGT	2686
Db	2583	GCCTGCCCCCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGT	2642
Qу	2687	CTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACT	2746
Db	2643	CTCAGACCGGTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACT	2702
Qу	2747	ATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAA	2806
Db	2703	ATAAGAGGAGCTACCCCACGAACTCGCTCACGAGAAGCCACCACGGCCACCACTCTCAAAA	2762
QУ	2807	GAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGG	2866
Db	2763	GAAACAACACTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGG	2822
QУ	2867	GAGACAACCCGCCGCCCGCCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGC	2926
Db	2823	GAGACAACCCGCCGCCCCCCGCAGAGGGTGGACTCCATCCA	2882
QУ	2927	CATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCC	2986
Db	2883	CATCTGGCCAGGCCGTGACTGTCTCGAGGCAGCCCAGCC	2942
Qу	2987	CAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCT	3046
Db	2943	CAAGGTCGGGGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCT	3002
Qу	3047	TTGCTCCCCTTTCCACATCCATGAAGCCCAATGATGCGTGTACA 3090	
Db	3003	TTGCTCCCCTTTCCACATCCATGAAGCCCAATGATGCGTGTACA 3046	

RESULT 7

US-10-393-892-30

- ; Sequence 30, Application US/10393892
- ; Publication No. US20030186302A1
- ; GENERAL INFORMATION:
- ; APPLICANT: WANG, YIXIN
- ; TITLE OF INVENTION: COLORECTAL CANCER DIAGNOSTICS
- ; FILE REFERENCE: CDS 267 US NP
- ; CURRENT APPLICATION NUMBER: US/10/393,892
- ; CURRENT FILING DATE: 2003-03-21
- ; PRIOR APPLICATION NUMBER: 60/368,798
- ; PRIOR FILING DATE: 2002-03-29
- ; NUMBER OF SEQ ID NOS: 49
- ; SOFTWARE: PatentIn version 3.1
- ; SEQ ID NO 30

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; LENGTH: 4250
; TYPE: DNA
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; ORGANISM: human US-10-393-892-30

Score 3032; DB 14; 98.0%; Length 4250; Query Match Best Local Similarity 98.4%; Pred. No. 0; Mismatches Matches 3093; Conservative 0: 0; Indels 51; Gaps 1; 1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60 Qу 250 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 309 Dh 61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120 Qу 310 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 369 Db 121 TTTGTGGGCCACAAGCCAGGACGGACACCACACAGAGGCACAGGCTGGACATCCAGATG 180 Qу 370 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 429 Db 181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240 Qy 430 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 489 Db 241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300 Qy 490 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 549 Db 301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360 Qу 550 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 609 Db Qу 610 ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTTGTCTGTGGAACTAATGCCTTC 669 Db 421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480 Qy 670 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 729 Db 481 GGAATGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540 Qу 730 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 789 Db 541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600 Qу 790 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 849 Db 601 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 660 Qy 850 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 909 Db 661 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 720 Qy 910 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 969 Db

QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCCAAGAGTGGCTCAGGTTTTGTAAGAAT	780
Db	970		1029
QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1030	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1089
QУ	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1149
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1209
Qy	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210		1269
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1389
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1510	${\tt ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG}$	1569
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1570	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1629
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1630	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1689
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1690	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1749
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1750	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1809
Qу	1561	${\tt TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA$	1620

.

Db	1810	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1870	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1929
QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1930	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	1989
QУ	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2050	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2109
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2169
QУ	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
Qy	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2290	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2349
Qy	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2409
Qy	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410		2469
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2470	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2529
Qу	2230	AAAGCAGACCACCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2289
Db	2530		2589
QУ	2290	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAACCAGAACCTC	2349
Db	2590		2649
Qy	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409

Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2709
QУ	2410	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2710	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTCCTGCCCATCACGCAGCAG	2769
QУ	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db	2770	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2829
Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
Db	2830	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2889
ДУ		CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	
Db			
QΥ		CGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	
Db		CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	
QУ	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769
Db	3010	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	3069
QУ			2829
Db		TCGCTCACGAGAAGCCACCACCACCTCTCAAAAGAAACAACACTAACTCCTCCAAT	
QУ		TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	
Db		${\tt TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCCCGCCCCCCCC$	
QΥ		CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	
Db	3190	CAGAGGGTGGACTCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	3249
QУ	2950	TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3009
Db	3250	TCGAGGCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3309
Qу	3010	CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG	3069
Db	3310	CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG	3369
Qу	3070	AAGCCCAATGATGCGTGTACATAA 3093	
Db	3370	AAGCCCAATGATGCGTGTACATAA 3393	

RESULT 8

US-10-394-382-30

; Sequence 30, Application US/10394382

[;] Publication No. US20030186303A1

[;] GENERAL INFORMATION:

[;] APPLICANT: Wang, Yixin

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FILE REFERENCE: CDS 266 US NP
  CURRENT APPLICATION NUMBER: US/10/394,382
  CURRENT FILING DATE: 2003-03-21
  PRIOR APPLICATION NUMBER: 60/368,687
  PRIOR FILING DATE: 2002-03-29
  NUMBER OF SEQ ID NOS: 49
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 30
  LENGTH: 4250
  TYPE: DNA
  ORGANISM: human
US-10-394-382-30
                  98.0%;
                        Score 3032; DB 14; Length 4250;
 Query Match
                  98.4%; Pred. No. 0;
 Best Local Similarity
                                                      1;
                       0; Mismatches
                                    0;
                                       Indels
                                             51:
                                                 Gaps
 Matches 3093; Conservative
        1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60
Qy
          250 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 309
Db
        61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120
Qy
          310 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 369
Db
       121 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 180
Qу
          370 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 429
Db
       181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240
Qу
          430 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 489
Db
       241 ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300
Qу
          490 ATAGACACATCACACGGAAGAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 549
Db
       301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360
Qу
          550 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 609
Dh
       Qy
          Db
       421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480
Qу
          670 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 729
Db
       481 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540
Qу
          730 GGAATGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 789
Db
       541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600
Qу
          790 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 849
Db
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TITLE OF INVENTION: COLORECTAL CANCER DIAGNOSTICS

QУ	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	850		909
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	910	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	969
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	970	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	1029
Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1030		1089
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1149
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1209
Qу	961	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210		1269
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1389
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1510	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1569
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1570	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1629
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Dh	1630		1689

Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1690		1749
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1750		1809
Qу	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1810	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1870	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1929
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1930	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	1989
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
QУ	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db		CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	
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QУ		TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	
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QΆ		CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	
Db		CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	
QУ		GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	
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Qу		AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	
Db		AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	
Qу		ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	
Db		ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	
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Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2709
Qу		CCCCTGCGGGCCTCCCCCAGCCACCATCCCCAGCGTGGTGCTCCTGCCCATCACGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	
Db		CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	
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Qу	2830	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	2889
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Qу	2890	CAGAGGGTGGACTCCAGCTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	2949
Db	3190		3249
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Db	3250	TCGAGGCAGCCCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3309
Qу	3010	CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG	3069
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Qу	3070	AAGCCCAATGATGCGTGTACATAA 3093	

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RESULT 9
US-10-120-988-330
; Sequence 330, Application US/10120988
: Publication No. US20030219745A1
; GENERAL INFORMATION:
  APPLICANT: Tang, Y. Tom
  APPLICANT: Goodrich, Ryle
  APPLICANT:
            Liu, Chenghua
  APPLICANT: Ren, Feiyan
  APPLICANT: Wang, Dunrui
  APPLICANT: Drmanac, Radoje T.
  TITLE OF INVENTION: No. US20030219745A1el Nucleic Acids and
  TITLE OF INVENTION: Polypeptides
  FILE REFERENCE: 802CON
  CURRENT APPLICATION NUMBER: US/10/120,988
  CURRENT FILING DATE: 2002-04-11
  PRIOR APPLICATION NUMBER: 09/774,528
  PRIOR FILING DATE: 2001-01-30
  NUMBER OF SEQ ID NOS: 441
  SOFTWARE: pt FL genes Version 2.0
 SEQ ID NO 330
   LENGTH: 4280
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (267)..(3410)
US-10-120-988-330
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 Query Match
                      98.4%; Pred. No. 0;
 Best Local Similarity
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                                                      51; Gaps
 Matches 3093: Conservative
                            0; Mismatches
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            327 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 386
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        121 TTTGTGGGCCACAAGCCAGGACGGAACACCACAGAGGCACAGGCTGGACATCCAGATG 180
Qy
            387 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 446
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Qу
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Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	687	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	746
Qу	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
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QУ		AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	
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Qу		CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAAGAACCA	
Db		CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	
Qу		TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTCAGGGAAATAGCA	
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Db		GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	
Qу Db			
Qy		TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	
Db			
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	
Db	1167		1226
Qу	961	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1227		1286
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1287	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1346
Qу	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1347	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1406
Qу	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200

Db	1407	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1466
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1467	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1526
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1527	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1586
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1587	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1646
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1647	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1706
QУ	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1707	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1766
QУ	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1767	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1826
QУ	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1827	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1886
QУ	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1887	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1946
QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1947	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	2006
QУ	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	2007	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2066
Qу	1750	CCCAGCACACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2067	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2126
QУ	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2127	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2186
Qу		TCCCATAATCACCAAGACAAGAAGGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	
Db	2187	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2246
QУ		CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	
Db	2247	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2306

Qу		GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	
Db	2307	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2366
ДÀ	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2367	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2426
Qу	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2427	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2486
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2487	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2546
Qу	2230	AAAGCAGACCAGCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2289
Db	2547	AAAGCAGACCAGCCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2606
QУ	2290	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAACCAGAACCTC	2349
Db	2607	CTGCAGCAGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGCAACCAGAACCTC	2666
QУ	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db	2667	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2726
QУ	2410	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2727	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2786
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db	2787	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2846
Qy	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
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Qу	2650	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	2709
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QУ	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769
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       3010 CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG 3069
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US-09-957-187-84
; Sequence 84, Application US/09957187
; Publication No. US20030054514A1
; GENERAL INFORMATION:
  APPLICANT: Shimkets, Richard A.
  APPLICANT: LaRochelle, William
  TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES AND PROTEINS ENCODED THEREBY
  FILE REFERENCE: 15966-540 CIP
  CURRENT APPLICATION NUMBER: US/09/957,187
  CURRENT FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 09/520,781
  PRIOR FILING DATE: 2000-03-03
  PRIOR APPLICATION NUMBER: 60/234,082
  PRIOR FILING DATE: 2000-09-20
  PRIOR APPLICATION NUMBER: 60/233,798
  PRIOR FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/174,485
  PRIOR FILING DATE: 2000-01-04
  NUMBER OF SEQ ID NOS: 85
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 84
   LENGTH: 4250
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (250)..(3390)
US-09-957-187-84
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Db	310	CCAGAAGATTCTGAGCCAATCAGTATTTCGCATTGCAACTATACAAAACAGTATCCGGTG	369
Qу	121	TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG	180
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Qу	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
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Qy	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	910	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	969
Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
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QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1030	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1089
Ov	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900

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Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1149
Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1209
Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1269
QУ	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329
QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1389
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db		ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db		GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	
Qу		AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	
Db		AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	
Qу		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
Db		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
QУ		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
Db		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
Qγ		TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Db		TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
Qу		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
Db		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
Qу	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726

Db	1930	${\tt AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT}$	1989
QУ	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2050		2109
QУ	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2169
QУ	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
QУ	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2290	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2349
Qy	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2409
Qу	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2469
QУ	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2470	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2529
QУ	2230	AAAGCAGACCAGCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2289
Db	2530	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2589
Qу	2290	CTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTC	2349
Db	2590	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAACCAGAACCTC	2649
QУ	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2709
Qy	2410	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2710	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2769
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db	2770	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2829

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Db	2830	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2889
Qу	2590	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2649
Db	2890	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2949
QУ	2650	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	2709
Db	2950	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	3009
QУ	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769
Db	3010	CTGGAAATGCACCACTCCTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	3069
Qy	2770	TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2829
Db	3070	TCGCTCACGAGAAGCCACCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	3129
Qу	2830	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCG	2889
Db	3130	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	3189
Qу	2890	CAGAGGGTGGACTCCAGCTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	2949
Db	3190	CAGAGGGTGGACTCCAGCTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	3249
QУ	2950	TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3009
Db	3250	TCGAGGCAGCCCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3309
QУ	3010	CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG	3069
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Qу	3070	AAGCCCAATGATGCGTGTACATAA 3093	
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- ; Sequence 13, Application US/10403676
- ; Publication No. US20040029150A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Alsobrook II, John
- ; APPLICANT: Anderson, David W.
- ; APPLICANT: Boldog, Ferenc L.
- ; APPLICANT: Burgess, Catherine E.
- ; APPLICANT: Casman, Stacie J.
- ; APPLICANT: Edinger, Shlomit R.
- ; APPLICANT: Gerlach, Valerie L.
- ; APPLICANT: Grosse, William M.
- ; APPLICANT: Guo, Xiaojia
- ; APPLICANT: Gusev, Vladimir Y.

```
; APPLICANT: Ji, Weizhen
  APPLICANT: LaRochelle, William J.
; APPLICANT: Lepley, Denise M.
; APPLICANT: Li, Li
; APPLICANT: Liu, Xiaohong
; APPLICANT: MacDougall, John R.
 APPLICANT: Malyankar, Uriel M.
  APPLICANT: Millet, Isabelle
  APPLICANT: Padigaru, Muralidhara
  APPLICANT: Patturajan, Meera APPLICANT: Peyman, John A.
; APPLICANT: Rastelli, Luca
; APPLICANT: Reiger, Daniel
; APPLICANT: Rothenberg, Mark E.
; APPLICANT: Shimkets, Richard A.
 APPLICANT: Stone, David J.
  APPLICANT: Taupier, Raymond J.
; APPLICANT: Vernet, Corine
; APPLICANT: Zerhusen, Bryan D.
; TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME,
AND METHODS OF USE
; FILE REFERENCE: 21402-573B
; CURRENT APPLICATION NUMBER: US/10/403,676
  CURRENT FILING DATE: 2003-03-31
  PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
 PRIOR APPLICATION NUMBER: 09/520,781
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 09/957,187
; PRIOR FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/127,352
  PRIOR FILING DATE: 1999-04-01
  PRIOR APPLICATION NUMBER: 09/538,092
; PRIOR FILING DATE: 2000-03-29
  PRIOR APPLICATION NUMBER: 09/604,286
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/140,584
  PRIOR FILING DATE: 1999-06-23
  PRIOR APPLICATION NUMBER: 60/370,381
  PRIOR FILING DATE: 2002-04-05
   PRIOR APPLICATION NUMBER: 60/384,297
  PRIOR FILING DATE: 2002-05-30
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 179
  SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 13
    LENGTH: 4250
    TYPE: DNA
;
    ORGANISM: Homo sapiens
    FEATURE:
    NAME/KEY: CDS
    LOCATION: (250)..(3390)
US-10-403-676-13
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98.3%; Pred. No. 0; Best Local Similarity Matches 3092; Conservative Gaps 1; Mismatches 1; Indels 51; 0: 1 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 60 Qy 250 ATGAGGTCAGAAGCCTTGCTGCTATATTTCACACTGCTACACTTTGCTGGGGCTGGTTTC 309 Db 61 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTG 120 Qy 310 CCAGAAGATTCTGAGCCAATCAGTATTTCGCATTGCAACTATACAAAACAGTATCCGGTG 369 Db 121 TTTGTGGGCCACAAGCCAGGACGGAACACCACAGAGGCACAGGCTGGACATCCAGATG 180 Qу 370 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 429 Db 181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240 Qу 430 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 489 Db 241 ATAGACACATCACACAGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 300 Qу 490 ATAGACACACACACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA 549 Db 301 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 360 Qy 550 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 609 Db Qу Db 421 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 480 Qy 670 AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC 729 Db 481 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 540 Qу 730 GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA 789 Db 541 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 600 Qу 790 AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT 849 Db 601 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 660 Qу 850 CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA 909 Db 661 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA 720 Qу 910 TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA 969 Db 721 GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT 780 Qу 970 GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT 1029 Db 781 GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC 840 Qy

Db	1030	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1089
Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1149
QУ	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1209
Qy	961	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210	AGCATCCCTGGGTCTGCAGTCTTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1269
Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Db	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329
ДĀ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1389
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
QУ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1510	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1569
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1570	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1629
QУ	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1630	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1689
QУ	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1690	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1749
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1750	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1809
Qу	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1810	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1870	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1929

QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db	1930	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	1989
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
Qy	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2050		2109
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2169
Qу	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
Qу	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
QУ	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2290	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2349
Qу	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2409
Qу	2110	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2469
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
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Db	2530	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2589
Qу	2290	CTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTC	2349
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Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
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Qy	2410	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
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ДÀ	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
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Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
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Qу	2770	TCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2829
Db	3070	TCGCTCACGAGAAGCCACCACCACCTCTCAAAAGAAACAACACTAACTCCTCCAAT	3129
Qу	2830	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	2889
Db	3130	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCC	3189
Qу	2890	CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	2949
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- ; Sequence 13, Application US/10449548
- ; Publication No. US20040018977A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Alvarez, Enrique
- ; APPLICANT: Anderson, David W.
- ; APPLICANT: Dhanabal, Mohanraj
- ; APPLICANT: Khramtsov, Nikolai V.
- ; APPLICANT: LaRochelle, William J.
- ; APPLICANT: Li, Li
- ; APPLICANT: Lichenstein, Henri

```
; APPLICANT: Ooi, Chean Eng
  APPLICANT: Padigaru, Muralidhara
  APPLICANT: Shimkets, Richard A.
 APPLICANT: Zhong, Mei
 TITLE OF INVENTION: SEMAPHORIN-LIKE PROTEINS AND METHODS OF USING SAME
 FILE REFERENCE: 15966-540CIP2
 CURRENT APPLICATION NUMBER: US/10/449,548
 CURRENT FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: 09/520,781
  PRIOR FILING DATE: 2000-03-03
  PRIOR APPLICATION NUMBER: 60/123,667
  PRIOR FILING DATE: 1999-03-09
  PRIOR APPLICATION NUMBER: 60/234,082
 PRIOR FILING DATE: 2000-09-20
 PRIOR APPLICATION NUMBER: 60/233,798
  PRIOR FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/174,485
  PRIOR FILING DATE: 2000-01-04
 PRIOR APPLICATION NUMBER: 10/403,676
 PRIOR FILING DATE: 2003-03-31
 PRIOR APPLICATION NUMBER: 60/371,002
 PRIOR FILING DATE: 2002-04-09
 PRIOR APPLICATION NUMBER: 60/384,798
 PRIOR FILING DATE: 2002-05-30
  PRIOR APPLICATION NUMBER: 60/402,407
  PRIOR FILING DATE: 2002-08-09
  PRIOR APPLICATION NUMBER: 60/443,062
 PRIOR FILING DATE: 2003-01-28
 NUMBER OF SEQ ID NOS: 58
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   TYPE: DNA
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   FEATURE:
   NAME/KEY: CDS
   LOCATION: (250)..(3390)
US-10-449-548-13
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 Query Match
 Best Local Similarity 98.3%; Pred. No. 0;
 Matches 3092; Conservative 0; Mismatches
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Db
         121 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 180
Qγ
            370 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 429
Db
         181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240
Qy
```

Db	430	ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT	489
Qу	241	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	300
Db	490	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	549
QУ	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	550	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	609
QУ	,361	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	420
Db	610	ATTAAAGTTCTTCTAAAGAAAACGATGATGCATTGTTTGT	669
QУ	421	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	480
Db	670		729
Qу	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	730	GGAATGCCCAGATGCCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	789
Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	790	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	849
Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
Db	850	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	909
Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
Db	910	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	969
QУ	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
Db	970		1029
QУ	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	1030	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	1089
QУ	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	1090	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	1149
QУ	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	1150	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	1209
Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	1210	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1269
Qy	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Dh	1270	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1329

QУ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Db	1330	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1389
QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
Db	1390	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1449
Qу	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Db	1450	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1509
Qу	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Db	1510	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1569
QУ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1570	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1629
Qу	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1630	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1689
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1690	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1749
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1750	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1809
Qу	1561	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1810	TGTAAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1869
QУ	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
QУ	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db		AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1990	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	2049
Qу	1750	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	1809
Db	2050	CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	2109
Qу	1810	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1869
Db	2110	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	2169

Qу		TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	
Db	2170	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	2229
Qу	1930	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	1989
Db	2230	CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	2289
Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2290	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2349
Qу	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
Db	2350	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCGGGGCTCCATGAGCAGCGTCACC	2409
Qу	21:10	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2169
Db	2410	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2469
Qу	2170	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2229
Db	2470	ACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGGCCAAGATGCTCATT	2529
Qy	2230	AAAGCAGACCAGCACCTGGACCTGACGGCCCTCCCCACCCCAGAGTCAACCCCAACG	2289
Db	2530	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2589
Qу	2290	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAACCAGAACCTC	2349
Db	2590	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAGGAACCAGAACCTC	2649
Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db	2650	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2709
QУ	2410	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2710	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2769
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db	2770	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2829
Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
Db	2830	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2889
Qу	2590	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2649
Db	2890	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2949
Qy	2650	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	2709
Db	2950	CGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	3009
Οv	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769

Db	3010		3069
Qу	2770	TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2829
Db	3070	TCGCTCACGAGAAGCCACCACGCCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	3129
Qy		TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	
Db	3130	TCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACCCGCCGCCCCCG	3189
QУ		CAGAGGGTGGACTCCAGCTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	
Db	3190	CAGAGGTGGACTCCAGCTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	3249
Qy		TCGAGGCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGTTGGGTTAGGTTAGGTTAGGTTAGGTCGAGGCCTACAACGTCACTGACAAGGTCGGGGCTGTTGGGTTAGGTTAGGTTAGGTCGAGGTCGGGGCTGTTGGGTTAGGTTAGGTCGGGGCTGTTGGGTTAGGTTAGGTCGAGGTCGAGGTCGGGGCTGTTGGGTTAGGTTAGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGCTGTTGGGTTAGGTCGGGGGTTGGGGGGTTAGGGTCGGGGGTTAGGGTTAGGTCGGGGTTAGGGTCGGGGCTGTTGGGTTAGGTCGGGGGTTAGGGTCGGGGGTTAGGGTCGGGGGTTAGGGTCGGGGGTTAGGGTCGGGGGTTAGGGTCGGGGGTTAGGGGCTGGGGGGTTAGGGGCTGGGGGGTTAGGGGCTGGGGGGGG	3009
Db	3250		3309
QУ		CCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCCTTTCGACATCGATCG	3069
Db	3310	CCCTCGCTAAAGCCGGACGTACCCCCAAACCATCCTTTGCTCCCCTTTCCACATCCATG	3369
Qу		AAGCCCAATGATGCGTGTACATAA 3093	
Db	3370	AAGCCCAATGATGCGTGTACATAA 3393	

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- ; Sequence 47, Application US/10403676
- ; Publication No. US20040029150A1
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  APPLICANT: Vernet, Corine
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  TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME,
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  FILE REFERENCE: 21402-573B
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  PRIOR APPLICATION NUMBER: 60/127,352
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   Remaining Prior Application data removed - See File Wrapper or PALM.
   NUMBER OF SEQ ID NOS: 179
   SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 47
   LENGTH: 3165
    TYPE: DNA
    ORGANISM: Homo sapiens
    FEATURE:
    NAME/KEY: CDS
    LOCATION: (13)..(3153)
US-10-403-676-47
                        97.8%; Score 3025.8; DB 12; Length 3165;
  Query Match
  Best Local Similarity 98.3%; Pred. No. 0;
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                                                           51; Gaps
  Matches 3088; Conservative
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Qy
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Db	253	ATAGACACATCACACGGAAGAAATTTATTGTAGCAAAAAACTGACATGGAAATCTAGA	312
QУ	301	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	360
Db	313	CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT	372
Qу	361	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	420
Db	373	ATTAAAGTTCTTCTAAAGAAAAACGATGATGCATTGTTTGT	432
Qу		AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	
Db	433	AACCCTTCCTGCAGAAACTATAAGATGGATACATTGGAACCATTCGGGGATGAATTCAGC	492
Qу	481	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	540
Db	493	GGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCACTGTTTGCAGATGGA	552
Qy	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
Db	553	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	612
QУ	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
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Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
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Qу	721	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	780
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Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
Db	793	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	852
QУ	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
Db	853	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	912
Qy	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
Db	913	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	972
Qy	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
Db	973	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1032

ζ	2y	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
Ι)b	1033	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1092
ζ	Σλ	1081	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGCTCATCCTCCTTAGAAAGATATGCAACC	1140
Ι)b	1093	GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	1152
ζ	Σλ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
I)b	1153	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1212
Ç	Σλ	1201	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1260
Ι)b	1213	GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	1272
Ç	ΣУ	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320
Ι)b	1273	${\tt ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG}$	1332
ζ	Σλ	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
I	Ob	1333	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1392
Ç	Σλ		AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	
I	Ob		AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	
Ç	Σλ		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
I	Ob		GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	
	Σλ		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
	Ob -		GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	
	2γ		TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	
	Ob -		TGTAAAAAAACCTGTATTGCCTCCAGAGACCCGTATTGTGGATGGA	
	Σy		GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	
	Ob			
	2y		AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	
	Ob		ATGGCATTCCTCTTG	
	Qy Ob		CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	
			CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	
	Qy Ob		CCCAGCACACCACAT CAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	
			CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	
,	2у	1010	CIOUNCI GONNOCHI CI GCI I ONCI CNCCI GNCNOCNONGCCCI I I GGGGGCNG I GI CI	±000

Db	1873	CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	1932
Qу	1870	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1929
Db	1933	TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	1992
Qу	1930	${\tt CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC}$	1989
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Qу	1990	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2049
Db	2053	GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	2112
Qу	2050	GTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCATGAGCAGCGTCACC	2109
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Db	2293	AAAGCAGACCACCTGGACCTGACGGCCCTCCCCACCCCA	2352
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Db	2353	CTGCAGCAGAAGCCGAGCCGCGGCAGCCGCGAGTGGGAGAGCAGAACCTC	2412
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Db	2413	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2472
Qу	2410	CCCCTGCGGGCCTCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2469
Db	2473	CCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGCCCATCACGCAGCAG	2532
Qу	2470	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2529
Db	2533	GGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGGCCCAGATGGCGCTG	2592
Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
Db	2593	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2652
Qу	2590	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2649
Db	2653	CCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCAAAGTTCCACAG	2712
Qу	2650	CGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC	2709

Db	2713	$\tt CGGGAGGCCTCCCTGGGTCCCCGGGAGCCTCCCTGTCTCAGACCGGTCTAAGCAAGC$	2772
Qу	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769
Db	2773	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2832
QУ	2770	TCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2829
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QУ	2890	CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	2949
Db	2953	CAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCCAGGCCGTGACTGTC	3012
QУ	2950	TCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGGGGCTGAAGCGTACG	3009
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US-10-449-548-47

- ; Sequence 47, Application US/10449548
- ; Publication No. US20040018977A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Alvarez, Enrique
- ; APPLICANT: Anderson, David W.
- ; APPLICANT: Dhanabal, Mohanraj
- ; APPLICANT: Khramtsov, Nikolai V.
- ; APPLICANT: LaRochelle, William J.
- ; APPLICANT: Li, Li
- ; APPLICANT: Lichenstein, Henri
- ; APPLICANT: Ooi, Chean Eng
- ; APPLICANT: Padigaru, Muralidhara
- ; APPLICANT: Shimkets, Richard A.
- ; APPLICANT: Zhong, Mei
- ; TITLE OF INVENTION: SEMAPHORIN-LIKE PROTEINS AND METHODS OF USING SAME
- ; FILE REFERENCE: 15966-540CIP2
- ; CURRENT APPLICATION NUMBER: US/10/449,548
- ; CURRENT FILING DATE: 2003-05-30
- ; PRIOR APPLICATION NUMBER: 09/520,781
- ; PRIOR FILING DATE: 2000-03-03
- ; PRIOR APPLICATION NUMBER: 60/123,667
- ; PRIOR FILING DATE: 1999-03-09
- ; PRIOR APPLICATION NUMBER: 60/234,082
- ; PRIOR FILING DATE: 2000-09-20

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PRIOR APPLICATION NUMBER: 60/233,798
  PRIOR FILING DATE: 2000-09-19
  PRIOR APPLICATION NUMBER: 60/174,485
  PRIOR FILING DATE: 2000-01-04
  PRIOR APPLICATION NUMBER: 10/403,676
  PRIOR FILING DATE: 2003-03-31
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/384,798
  PRIOR FILING DATE: 2002-05-30
  PRIOR APPLICATION NUMBER: 60/402,407
  PRIOR FILING DATE: 2002-08-09
  PRIOR APPLICATION NUMBER: 60/443,062
  PRIOR FILING DATE: 2003-01-28
  NUMBER OF SEQ ID NOS: 58
  SOFTWARE: CuraSeqList version 0.1
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  LENGTH: 3165
  TYPE: DNA
  ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (13)..(3153)
US-10-449-548-47
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                   98.3%;
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Qу
          133 TTTGTGGGCCACAAGCCAGGACGGAACACCACACAGAGGCACAGGCTGGACATCCAGATG 192
Db
       181 ATTATGATCATGAACGGAACCCTCTACATTGCTGCTAGGGACCATATTTATACTGTTGAT 240
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Db
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Qу
           313 CAGGCCGATGTAGACACATGCAGAATGAAGGGAAAACATAAGGATGAGTGCCACAACTTT 372
Db
        Qу
           Db
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	Qу	541	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	600
	Db	553	AAACTATACTCAGCCACAGTGACTGACTTCCTTGCCATTGACGCAGTCATTTACCGGAGT	612
	Qу	601	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	660
	Db	613	CTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAATGGTTGAAAGAACCA	672
ė	Qу	661	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCTTCAGGGAAATAGCA	720
	Db	673	TACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCAGGGAAATAGCA	732
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	Db	733	GTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTCAGGTTTGTAAGAAT	792
	Qу	781	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	840
	Db	793	GATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGTTCCTGAAGGCGCGC	852
	Qу	841	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	900
	Db	853	TTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTCTCCAGGCAGTTACA	912
	Qу	901	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	960
	Db	913	GATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTTCTACACCTTATAAC	972
	Qу	961	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1020
	Db	973	AGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTGCCAGTGTTTTTACT	1032
	Qу	1021	GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	1080
			GGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAGTTCCTGATGAACGA	
	~1		GTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAGAAAGATATGCAACC	
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	QУ	1141	TCCAATGAGTTCCCTGATGATACCCTGAACTTCATCAAGACGCACCCGCTCATGGATGAG	1200
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	~1		GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	
			GCAGTGCCCTCCATCTTCAACAGGCCATGGTTCCTGAGAACAATGGTCAGATACCGCCTT	
	Qv	1261	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1320

Db	1273	ACCAAAATTGCAGTGGACACAGCTGCTGGGCCATATCAGAATCACACTGTGGTTTTTCTG	1332
Qу	1321	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1380
Db	1333	GGATCAGAGAAGGGAATCATCTTGAAGTTTTTGGCCAGAATAGGAAATAGTGGTTTTCTA	1392
Qy	1381	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1440
Db	1393	AATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAAAATGCAGCTATGAT	1452
Qу	1441	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1500
Db	1453	GGAGTCGAAGACAAAAGGATCATGGGCATGCAGCTGGACAGAGCAAGCA	1512
Qу	1501	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1560
Db	1513	GTTGCGTTCTCTACCTGTGTGATAAAGGTTCCCCTTGGCCGGTGTGAACGACATGGGAAG	1572
Qy	1561	TGTAAAAAACCTGTATTGCCTCCAGAGACCCATATTGTGGATGGA	1620
Db	1573	TGTAAAAAACCTGTATTGCCTCCAGAGACCCGTATTGTGGATGGA	1632
Qу	1621	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1680
Db	1633	GCCTGCAGCCATTTATCACCCAACAGCAGACTGACTTTTGAGCAGGACATAGAGCGTGGC	1692
Qy .	1681	AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGA	1726
Db		AATACAGATGGTCTGGGGGACTGTCACAATTCCTTTGTGGCACTGAATGACATTTCAACT	
Qу	1727	ATGGGCATTCCAGTTCCCTCTTG	1749
Db	1753	CCTCTACCAGATAATGAAATGTCTTACAACACAGTGTATGGGCATTCCAGTTCCCTCTTG	1812
Qу		CCCAGCACACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	
Db		CCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAGTCTAGGGGAGGAATG	
Qy		CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	
Db		CTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTTTGGGGGCAGTGTCT	
Qу		TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	
Db		TCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACCTCAAAGGCCACGAC	
Qу		CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	
Db		CAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTTTCGTCATGGGGGCC	
Qу		GTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCAAAGACGTGGCTGTG	
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Db	2173	AAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGCCGGAGGCCATCCTC	2232
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Qу	2350	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2409
Db	2413	ATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGATTCCCACGGACCTG	2472
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Qу	2530	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2589
Db	2593	GAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATCTCAGCAGCAAGAGT	2652
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Qу	2710	CTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2769
Db	2773	CTGGAAATGCACCACTCCTCCTACGGGGTTGACTATAAGAGGAGCTACCCCACGAAC	2832
Qy	2770	TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2829
Db	2833	TCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACACTAACTCCTCCAAT	2892
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; Sequence 17, Application US/10403676
; Publication No. US20040029150A1
; GENERAL INFORMATION:
; APPLICANT: Alsobrook II, John
; APPLICANT: Anderson, David W.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Casman, Stacie J.
; APPLICANT: Edinger, Shlomit R.
; APPLICANT: Gerlach, Valerie L.
; APPLICANT: Grosse, William M.
; APPLICANT: Guo, Xiaojia
; APPLICANT: Gusev, Vladimir Y.
 APPLICANT: Ji, Weizhen
 APPLICANT: LaRochelle, William J.
 APPLICANT: Lepley, Denise M.
 APPLICANT: Li, Li
  APPLICANT: Liu, Xiaohong
; APPLICANT: MacDougall, John R.
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Millet, Isabelle
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Patturajan, Meera
; APPLICANT: Peyman, John A.
 APPLICANT: Rastelli, Luca
  APPLICANT: Reiger, Daniel
  APPLICANT: Rothenberg, Mark E.
 APPLICANT: Shimkets, Richard A.
 APPLICANT: Stone, David J.
; APPLICANT: Taupier, Raymond J.
 APPLICANT: Vernet, Corine
; APPLICANT: Zerhusen, Bryan D.
  TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME,
AND METHODS OF USE
; FILE REFERENCE: 21402-573B
; CURRENT APPLICATION NUMBER: US/10/403,676
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: 60/123,667
; PRIOR FILING DATE: 1999-03-09
; PRIOR APPLICATION NUMBER: 09/520,781
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; PRIOR FILING DATE: 2000-03-08

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PRIOR APPLICATION NUMBER: 09/957,187
  PRIOR FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 60/371,002
  PRIOR FILING DATE: 2002-04-09
  PRIOR APPLICATION NUMBER: 60/127,352
  PRIOR FILING DATE: 1999-04-01
  PRIOR APPLICATION NUMBER: 09/538,092
  PRIOR FILING DATE: 2000-03-29
  PRIOR APPLICATION NUMBER: 09/604,286
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: 60/140,584
  PRIOR FILING DATE: 1999-06-23
  PRIOR APPLICATION NUMBER: 60/370,381
  PRIOR FILING DATE: 2002-04-05
  PRIOR APPLICATION NUMBER: 60/384,297
  PRIOR FILING DATE: 2002-05-30
  Remaining Prior Application data removed - See File Wrapper or PALM.
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  LENGTH: 3106
  TYPE: DNA
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  NAME/KEY: CDS
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US-10-403-676-17
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Db	423	GGGATGAATTCAGCGGAATGGCCAGATGCCCATATGATGCCAAACATGCCAACGTTGCAC	482
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Db	483	TGTTTGCAGATGGAAAACTATACTCAGCCACAGTGACTGAC	542
Qу	587	TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT	646
Db	543	TCATTTACCGGAGTCTTGGAGAAAGCCCTACCCTGCGGACCGTCAAGCACGATTCAAAAT	602
Qу	647	GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT	706
Db	603	GGTTGAAAGAACCATACTTTGTTCAAGCCGTGGATTACGGAGATTATATCTACTTCTTCT	662
Qу	707	TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC	766
Db	663	TCAGGGAAATAGCAGTGGAGTATAACACCATGGGAAAGGTAGTTTTCCCAAGAGTGGCTC	722
QУ	767	AGGTTTGTAAGAATGATATGGGAGGATCTCAAAGAGTCCTGGAGAAACAGTGGACGTCGT	826
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Db	783	TCCTGAAGGCGCGCTTGAACTGCTCAGTTCCTGGAGACTCTCATTTTTATTTCAACATTC	842
Qу	887	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	946
Db	843	TCCAGGCAGTTACAGATGTGATTCGTATCAACGGGCGTGATGTTGTCCTGGCAACGTTTT	902
Qу	947	CTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTG	1006
Db	903	CTACACCTTATAACAGCATCCCTGGGTCTGCAGTCTGTGCCTATGACATGCTTGACATTG	962
Qу	1007	CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	1066
Db	963	CCAGTGTTTTTACTGGGAGATTCAAGGAACAGAAGTCTCCTGATTCCACCTGGACACCAG	1022
Qу	1067	TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAG	1126
Db	1023	TTCCTGATGAACGAGTTCCTAAGCCCAGGCCAGGTTGCTGTGCTGGCTCATCCTCCTTAG	1082
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Db	1263		1322
Qу	1367	ATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAA	1426
Db	1323	ATAGTGGTTTTCTAAATGACAGCCTTTTCCTGGAGGAGATGAGTGTTTACAACTCTGAAA	1382
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Db	1743	CCAGTTCCCTCTTGCCCAGCACAACCACATCAGATTCGACGGCTCAAGAGGGGTATGAG	1802
Qу	1796	CTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTT	1855
Db	1803	CTAGGGGAGGAATGCTGGACTGGAAGCATCTGCTTGACTCACCTGACAGCACAGACCCTT	1862
QУ	1856	TGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACC	1915
Db	1863	TGGGGGCAGTGTCTTCCCATAATCACCAAGACAAGAAGGGAGTGATTCGGGAAAGTTACC	1922
QУ	1916	TCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTT	1975
Db	1923	TCAAAGGCCACGACCAGCTGGTTCCCGTCACCCTCTTGGCCATTGCAGTCATCCTGGCTT	1982
QУ	1976	TCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCGCA	2035
Db	1983	TCGTCATGGGGGCCGTCTTCTCGGGCATCACCGTCTACTGCGTCTGTGATCATCGGCC	2042
Qу	2036	AAGACGTGGCTGTGGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCGCCGGGGCTCCA	2095
Db	2043	AAGACGTGGCTGTGCAGCGCAAGGAGAAGGAGCTCACCCACTCGCCGGGGGCTCCA	2102

Qу	2096	TGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGC	2155
Db	2103	TGAGCAGCGTCACCAAGCTCAGCGGCCTCTTTGGGGACACTCAATCCAAAGACCCAAAGC	2162
Qу	2156	CGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGG	2215
Db	2163	CGGAGGCCATCCTCACGCCACTCATGCACAACGGCAAGCTCGCCACTCCCGGCAACACGG	2222
Qy	2216	CCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCA	2275
Db	2223	CCAAGATGCTCATTAAAGCAGACCAGCACCACCTGGACCTGACGGCCCTCCCCACCCCAG	2282
Qy	2276	AGTCAACCCCAACGCTGCAGCAGAAGCGGAAGCCCAGCCGCGGCAGCCGCGAGTGGGAGA	2335
Db	2283	AGTCAACCCCAACGCTGCAGCAGAAGCCGAAGCCCAGCCGCGCAGCCGCGAGTGGGAGA	2342
Qу	2336	GGAACCAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGA	2395
Db	2343	GGAACCAGAACCTCATCAATGCCTGCACAAAGGACATGCCCCCCATGGGCTCCCCTGTGA	2402
Qγ	2396	TTCCCACGGACCTGCCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGC	2455
Db	2403	TTCCCACGGACCTGCCCTGCGGGCCTCCCCCAGCCACATCCCCAGCGTGGTGGTCCTGC	2462
QУ	2456	CCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGG	2515
Db	2463	CCATCACGCAGCAGGGCTACCAGCATGAGTACGTGGACCAGCCCAAAATGAGCGAGGTGG	2522
Qy	2516	CCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATC	2575
Db	2523	CCCAGATGGCGCTGGAGGACCAGGCCGCCACACTGGAGTATAAGACCATCAAGGAACATC	2582
Qy	2576	TCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCC	2635
Db	2583	TCAGCAGCAAGAGTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCC	2642
Qу	2636	CCAAAGTTCCACAGCGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCG	2695
Db		CCAAAGTTCCACAGCGGGAGGCCTCCCTGGGTCCCCCGGGAGCCTCCCTGTCTCAGACCG	
Qy	2696	GTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGA	2755
Db	2703	GTCTAAGCAAGCGGCTGGAAATGCACCACTCCTCTTCCTACGGGGTTGACTATAAGAGGA	2762
QУ	2756	GCTACCCCACGAACTCGCTCACGAGAAGCCACCACGCCACCACTCTCAAAAGAAACAACA	2815
Db	2763	GCTACCCCACGAACTCGCTCACGAGAAGCCACCAGGCCACCACTCTCAAAAGAAACAACA	2822
Qу	2816	CTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACC	2875
Db	2823	CTAACTCCTCCAATTCCTCTCACCTCTCCAGAAACCAGAGCTTTGGCAGGGGAGACAACC	2882
QУ	2876	CGCCGCCCGCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCC	2935
Db	2883	CGCCGCCCGCAGAGGGTGGACTCCATCCAGGTGCACAGCTCCCAGCCATCTGGCC	2942

QУ	2936	AGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGG	2995
Db	2943	AGGCCGTGACTGTCTCGAGGCAGCCCAGCCTCAACGCCTACAACTCACTGACAAGGTCGG	3002
QУ	2996	GGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCC	3055
Db	3003	GGCTGAAGCGTACGCCCTCGCTAAAGCCGGACGTACCCCCCAAACCATCCTTTGCTCCCC	3062
QУ	3056	TTTCCACATCCATGAAGCCCAATGATGCGTGTACA 3090	
Db	3063	TTTCCACATCCATGAAGCCCAATGATGCGTGTACA 3097	

Search completed: March 26, 2004, 04:05:54 Job time: 1107.37 secs